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# CITY OF MELBOURNE.



## REPORT OF HEALTH COMMITTEE

FOR THE

YEAR ENDED 31st DECEMBER, 1945.

*Adopted by Council on 24th June, 1946.*

RCB 23 h

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# CITY OF MELBOURNE



## REPORT OF THE HEALTH COMMITTEE FOR THE YEAR 1945.

### MEMBERS OF COMMITTEE

Councillor Townsend (Chairman)  
Councillor Boulton  
Councillor Brens  
Councillor Coleman  
Councillor Holland  
Councillor E. L. Morton

The Health Committee submits for the information of the Council, a report regarding the work carried out under the direction of the Committee during the year ended 31st December, 1945.

### REPORTS OF OFFICERS

A report by the Medical Officer of Health (Dr. John Dale) upon the work of the Health Department during 1945, and upon the health of the inhabitants of the City generally, is attached hereto, together with reports by Dr. Hilda E. Kincaid upon child welfare work, by Dr. Hilda Bull upon infectious diseases, by Mr. T. G. O. Jordan, the Chief Health Inspector, on the routine work of the Department, by Messrs. Dunn, Son and Stone, City Analysts, and by Professor Sydney D. Rubbo, Director of the Bacteriological Laboratory, University of Melbourne. Full details of the various health activities of the Council are contained in these reports.

### CHILD WELFARE

The report of Dr. Hilda Kincaid upon the work of the child welfare branch gives details of the year's activities. The outstanding feature of the year is again the low infantile mortality rate. The figure for the City, 26.3, is lower than that for the whole State, 28.0, and just below the figure for Greater Melbourne, 26.9. Dr. Kincaid's report includes an interesting discussion of the benefits of kindergartens, and the influence of the kindergarten and of the home respectively on the well-being of the child.

The new Hopetoun Free Kindergarten and Creche erected at the corner of Racecourse Road and Victoria Street, Flemington, at a cost of £8,428/1/-, plus cost of equipment, £902/0/8, was officially opened by the Lord Mayor (Councillor Sir Thomas Nettlefold, O.B.E.), on the 28th March, 1945, and children were first admitted to the Institution on the 12th February, 1945.

The Committee desires to record its high appreciation of the services of the City Architect (Mr. E. N. Beilby), Mr. G. A. Ozanne and the other members of his staff in connection with the planning, erection and equipment of the Hopetoun Free Kindergarten. This is the second kindergarten erected by the Council and reflects credit not only upon the Council but also upon the City Architect and staff, and it will fill a long-felt need in the interests of child welfare in the Flemington District.

The maintenance grants made by the Council to Kindergartens and Creches for the year 1945-1946 were the same as for the previous year, viz., £1,000 and £500 respectively. On the Committee's recommendation, the Council approved of the policy that the State Government subsidy of £4 per child per annum to kindergartens shall be credited against the half cost of maintenance payable by the local Committees of Management of the Lady Huntingfield and Hopetoun Free Kindergartens and that, in the event of aforementioned subsidy being increased beyond that figure, such addition shall be credited to the Council's portion of the cost of maintenance. The Council's agreements are being amended accordingly.

During the year, the Council, on the Committee's recommendation, adopted a long-range policy extending over a period of five or more years for the extension of pre-school child welfare facilities throughout the City of Melbourne by the establishment of a number of additional modern kindergartens of large size, each of which would accommodate 100 children, or the equivalent in small units, to be operated on a basis parallel to that in existence at the Lady Huntingfield Free Kindergarten and the Hopetoun Free Kindergarten. A survey is now being made of the City to ascertain the kindergarten requirements within the area under the jurisdiction of the Council. In order to ensure that adequate properly trained staff will be available for such kindergartens when erected, the sum of £1,100 will be provided by the Council to establish scholarships covering a period of three years for the training of kindergarteners and play leaders. The Committee proposes to confer with the Advisory Committee re care of pre-school children, of which Councillor Townsend is Chairman, for the purpose of obtaining such Committee's goodwill and co-operation in connection with the Council's scheme.

The Committee continued its assistance to parents in indigent circumstances by the supply of milk and an iron and vitamin mixture, the total expenditure being £1,115/11/6, of which the amount of £465/11/- was refunded by parents. The number of families needing assistance in the supply of milk and foodstuffs shows a further reduction owing to the improved economic conditions.

The total amount expended by the Council on the conduct and maintenance of the child welfare centres in the City of Melbourne during 1945 was £4,072/12/3, of which £1,155 was contributed by the State Government.

Since 1927, the Council has spent £98,399 on the construction, equipment and maintenance of child welfare centres, kindergartens and creches.

The Committee desires to record again its appreciation of the services of all those who have contributed to the carrying out of child welfare work throughout the year, especially of the Committees of Management of the Lady Huntingfield Free Kindergarten and the Hopetoun Free Kindergarten and the voluntary workers in all the other kindergartens and creches in the City of Melbourne.

### INFECTIOUS DISEASES

The accompanying reports of the Medical Officer of Health and Dr. Hilda Bull show the amount of preventive work against infectious diseases.

The outstanding feature of the year was the extension to Victoria of poliomyelitis (infantile paralysis) which was already prevalent in New South Wales and Queensland. Fortunately, there were only three cases reported in the City of Melbourne in comparison with 200 cases in 1937-38 epidemic.

The Committee recommends that the Honourable the Minister of Health be approached with a view to the organisation of a wide-spread campaign of publicity and advertising, in order to stimulate parents to protect their children. A Publicity Division of the Department of Health has been operating in New South Wales and the establishment of a similar Publicity Division in Victoria would be helpful in advising the public on many matters of health. Campaigns conducted by such Department would be all the more valuable if they were directed mainly towards the reassurance provided by preventive work and early diagnosis, particularly with reference to tuberculosis and inoculation against diphtheria.

The number of diphtheria cases reported reached a new low record, viz. 35, with three deaths.

The number of deaths (72) from tuberculosis is slightly below that of the average for the five war years, which was 76.

### INFECTIOUS DISEASES HOSPITAL— FAIRFIELD

The Council's contributions towards the Queen's Memorial Infectious Diseases Hospital amounted to £12,325/10/2.

The contributions for the past 5 years were:—

1941 .....	11,105	7	4
1942 .....	11,501	7	0
1943 .....	12,001	4	0
1944 .....	12,414	11	4
1945 .....	12,325	10	2

### HEATHERTON SANATORIUM

The Council's contribution towards the Heatherton Sanatorium was £388/19/1.

The total amount contributed by the Council towards the maintenance of the Heatherton Sanatorium since its foundation in 1914 was £38,704/12/1.

Since the 1st February, 1945, the State Government, in accordance with the provisions of the Heatherton Sanatorium Act 1944, has undertaken the full financial responsibility of the institution, and certain Metropolitan Municipalities, including the City of Melbourne, have been relieved of their annual contribution of half the cost of maintenance.

### FOOD SUPPLIES

Reports upon the examination of milk indicated that the number of failures to comply with the standard for the chemical quality of the milk is the highest recorded since 1928. Twenty four (6.9 per cent) of the 323 samples did not comply with the standard. This was, no doubt, due to the closer surveillance exercised by the Council's Health Inspectors during the shortage of supplies of milk.

The City of Melbourne, in conjunction with the Municipalities of Collingwood, Fitzroy, Port Melbourne, Richmond and South Melbourne, has been required by the Minister of Agriculture, in accordance with the provisions of the Milk Pasteurization Act, 1943, to establish a pasteurization depot, at an estimated cost of £260,000, for the pasteurization of milk in the area covered by these Municipalities, which are included in Group 3 of the Milk Pasteurization Scheme approved by the Minister.

A conference of representatives of the Municipalities comprising Group 3, convened by the Committee, was held on the 30th July last. The conference affirmed the principle of direct municipal control of the pasteurization depot for Group 3 and requested the Town Clerks of the Municipalities concerned to consider the question of a site, finance and other matters incidental to the establishment of a depot, with the object of preparing matters for discussion by a sub-committee consisting of one representative of each of the Municipalities comprising Group 3.

The report of the Town Clerks is now in the course of preparation.

In view of the government control of all materials for the purpose of ensuring the early erection of essential houses for the people, it is not expected that permission will be granted by the Government for some considerable time for the erection of pasteurization depots.

In the meantime, representations have been made to the Government by the Municipal Association of Victoria for an amendment of the Milk Pasteurization Act 1943 to enable a group of Municipalities to constitute a Trust consisting of elected municipal representatives and that such Trust be given all necessary powers to carry out its functions instead of the Councils operating in six separate groups.

### HOUSING

The continued scarcity of building materials and labour prevented much progress being made in bringing existing houses up to the standards of the Habitation Regulations, but every effort has been made to maintain houses in the City of Melbourne in a reasonable weather-proof and habitable condition.

The Committee has under consideration a scheme for the replanning of certain of the poorer portions of the City of Melbourne, with a view to the elimination of slum pockets and general improvement of housing standards.

### HEALTH AND SAFETY CONDITIONS IN THEATRES AND CINEMATOGRAPH HALLS

Following on a destructive outbreak of fire at the Regent Theatre, Melbourne, in April, 1945, the Health Committee and the Traffic and Building Regulations Committee of the Council instructed the Building Surveyor and the Medical Officer of Health to submit a report in regard to the Health and Safety Conditions in theatres and cinematograph halls in the City.

Certain recommendations made by the officers concerned, together with a recommendation that provision should be made for increased exits in City theatres, were adopted by the Council and such recommendations, together with a copy of the joint report of the Council's Building Surveyor and the Medical Officer of Health were forwarded to the Department of Health on the 10th December, 1945, for its consideration.

### INCREASE OF INSPECTORIAL STAFF

Four additional Health Inspectors were recently appointed by the Council. This increase in the inspectorial staff will ensure a higher standard of hygiene throughout the City.

W. C. L. TOWNSEND, Chairman.  
H. S. WOOTTON, Town Clerk.

### ADENDUM

By special resolution adopted at its meeting held on 13th June, 1946, the Committee decided to place on record its high appreciation of the valuable services of the Chairman (Councilor W. C. L. Townsend, LL.M.) as the Council's representative on the Heatherton Sanatorium Board for a period of seven years. At all times he displayed a keen interest in the work of the institution and in the welfare of patients, and ably represented the Council in connection with the administration of the institution.

20th June, 1946.

H. S. WOOTTON, Town Clerk.

# REPORT OF THE MEDICAL OFFICER OF HEALTH

Health Department,  
Town Hall Chambers, Melbourne.  
23rd May, 1946.

The Chairman and Members,  
Health Committee.

Gentlemen,

I beg to present my report for the year 1945.

The health of the community has again been relatively good, and apart from the development in the latter part of the year of an epidemic of infantile paralysis, which appears, fortunately, to be for a much less severe type than that of 1937-38, there has been no undue prevalence of infectious or other disease. It seems that similar satisfactory conditions have prevailed in North America and in Great Britain, and it is a tribute to the wisdom of those in charge of food control in Great Britain that, in spite of the shortage of common foodstuffs, the health of the people has been so well maintained. Reports coming from the Continent of Europe, on the other hand, indicate that Great Britain is poised, so to speak, on the limit of safety, and that the near-famine conditions which have existed, and continue, in parts of Europe, have been accompanied by very great increases in the death rates of infants, and from tuberculosis. It is impossible not to be apprehensive that some damaging organism or virus, such as that of the great influenza pandemic in 1918-19, may become established in Europe and play havoc with the obviously debilitated populations, and perhaps, also, among the relatively healthy in other parts of the world. The self-denying efforts which the undevastated countries are being called upon to make in order to alleviate famine in Europe and elsewhere, may well pay dividends in other spheres than the humanitarian.

According to reports received, valuable experience is being accumulated in the application of such drugs and chemicals as the sulpha drugs, penicillin, and D.D.T. Considerable strides have been made in the use of old and new drugs in the control of malaria, and there is a suggestion, though at present little more than that, that a therapeutic agent similar to penicillin may prove useful in the control of tuberculosis.

## VITAL STATISTICS

The figures for the last ten years and of the averages for the five-year period 1931-1935, as supplied by the Government Statist, are shown in Table I:

TABLE I.

Year	Estimated Mean Population	No. of Births	Birth Rate	No. of Deaths	Death Rate	Infantile Mortality Rate per 1000 live Births
1931-35 (5 year average)	93,436	1131	12.2	1095	11.8	51.7
1936	92,850	1131	12.5	1147	12.7	53.9
1937	92,850	1176	13.0	1104	12.2	41.7
1938	92,900	1156	12.8	1135	12.6	39.8
1939	93,200	1105	12.2	1208	13.4	36.2
1940	93,650	1257	13.7	1210	13.3	54.1
1941	95,400	1303	14.2	1186	12.9	36.8
1942	95,500	1499	16.1	1283	13.0	44.0
1943	99,393	1804	18.1	1226	12.3	43.8
1944	100,485	1655	16.5	1227	12.2	32.0
1945	101,130	1709	16.9	1225	12.1	26.3

The number of births recorded in the City, 1709, was higher than that of last year, 1655. The birth-rate, 16.9, is only slightly higher than last year, but is 33 per cent. above the average for the years 1931-1935, for which period the birth-rate reached its lowest ebb of 12.3. The number of births in Melbourne City, though greater than last year, is less than that for 1943, which was 1804—50 per cent. above the level of the depression years—but reference to the figures for the State as a whole show that these fluctuations in Melbourne City are of a local nature and that for the whole State there has been a steady rise in the number of births during the war years, the figure for 1945 being the highest yet recorded. Whilst this acute rise in the birth rate may be regarded as a war-time phenomenon, based largely on the psychological or emotional reaction of young people to the stresses and conditions of war, it may also be due, perhaps in considerable part, to the economic prosperity and apparent security which the war has brought to large sections of the younger generation. The birth-rate was rising in the pre-war years owing, probably, to the improved prosperity resulting from preparations for war. If our "preparations for peace" can maintain a similar prosperity and engender an enduring sense of security, it may be that the high birth-rate will be happily maintained, or even increase, if we deserve it, though prospects at the moment are not bright. It is probable, also, that the improved maternity bonus and the partial security resulting from child endowment are playing a favourable part.

# HOPETOUN KINDERGARTEN



Front view of Kindergarten from Victoria Street



One of the Class rooms

WILLCOME  
LIBRARY  
+  
Ann Rep  
V.F.28  
. K.9  
M.S.1  
1945



Rear view of Kindergarten



Corner of Class room showing lavatory beyond



Artists at work by the Dolls' corner

The record low figures for infant mortality recorded last year have been again improved upon in 1945. The figure for the City is 26.3, for Greater Melbourne 26.9, and for the State as a whole 28.0. These are very remarkable figures, and bring Victoria in this respect up to the standard which was quoted in my last report as having been attained by New York City. It is to be noted, however, that when birth-rates are rising sharply, the infantile mortality figure, which is calculated by dividing the number of deaths of infants under one year by the number of births recorded during the year, tends to be given a slightly deceptive favourable bias.

The general death-rate for Melbourne City is just below the figures for the years 1943 and 1944 and well below that for the previous decade. In this case also, however, a rapid increase in the number of children tends to lower the general death-rate. Man has to die sometime of some cause, but in a population which is increasing rapidly, either by new births or by the influx of large numbers of immigrants who are in the early decades of life, the figure may remain surprisingly low.

## CHILD WELFARE

The report of Dr. Kincaid upon the work of the child welfare branch gives details of the year's activities.

The most striking feature in this sphere has been the continued development of public interest in the provision of nursery schools and kindergarten facilities for children of pre-school age, which must give great satisfaction to those public-spirited citizens who have pioneered this work and established its great value. This interest has been augmented and fostered by the work of the new branch of Maternal and Child Hygiene in the Department of Health, the formation of which, as Dr. Kincaid points out, was largely due to the wisdom and tireless enthusiasm of its Director, Dr. Scantlebury Brown.

The development of this work, however, which is so widely sought and needed, both in the City area and throughout the State, is necessarily delayed by two very serious handicaps, those imposed respectively by the shortage of building materials, in relation to the very great demands upon them, and by the shortage of trained personnel to take charge of children in organised play groups and in nursery schools and kindergartens. The demand for trained teachers has suddenly become far in excess of those graduating from the admirable training college conducted by the Free Kindergarten Union, and though this body has received encouraging assistance by way of grants from Commonwealth and State for training purposes, the difficulties of obtaining the necessary new buildings and the lapse of years which must ensue before girls can be adequately trained, makes it impossible to meet adequately the current demands for trained teachers. This is extremely regrettable, but almost nothing can be done about it, since the key to success in child welfare work is that it should be conducted by adequately trained personnel.

No benefit can be expected from gathering children together to be "minded" by untrained people, however good their intentions; and, even when the personnel is well-trained, the good results that can be obtained may be, as Dr. Kincaid points out in her report, nullified to some extent by bad conditions in the home. There exists a not inconsiderable percentage of parents whose mentality and mode of life is such that their children, if they remain with them, cannot be as healthy as they should be. This problem exists in every community and is usually accentuated in the poorer parts of the great cities. It can be overcome only gradually by increase of kindergartens and a great improvement of schools and social conditions, so that the next generation may be more uniformly civilised. It will be necessary, also, to take more pains to discover and protect the small percentage of the population who are born feeble-minded.

The new Hopetoun Kindergarten, built by the Melbourne City Council in Kensington, was opened during the year, two of the three classrooms having been completed and occupied, and has been operating very successfully indeed under the enthusiastic and capable directress, Miss Campbell-Smith, and under the direction of the local committee, to the members of which our thanks are due.

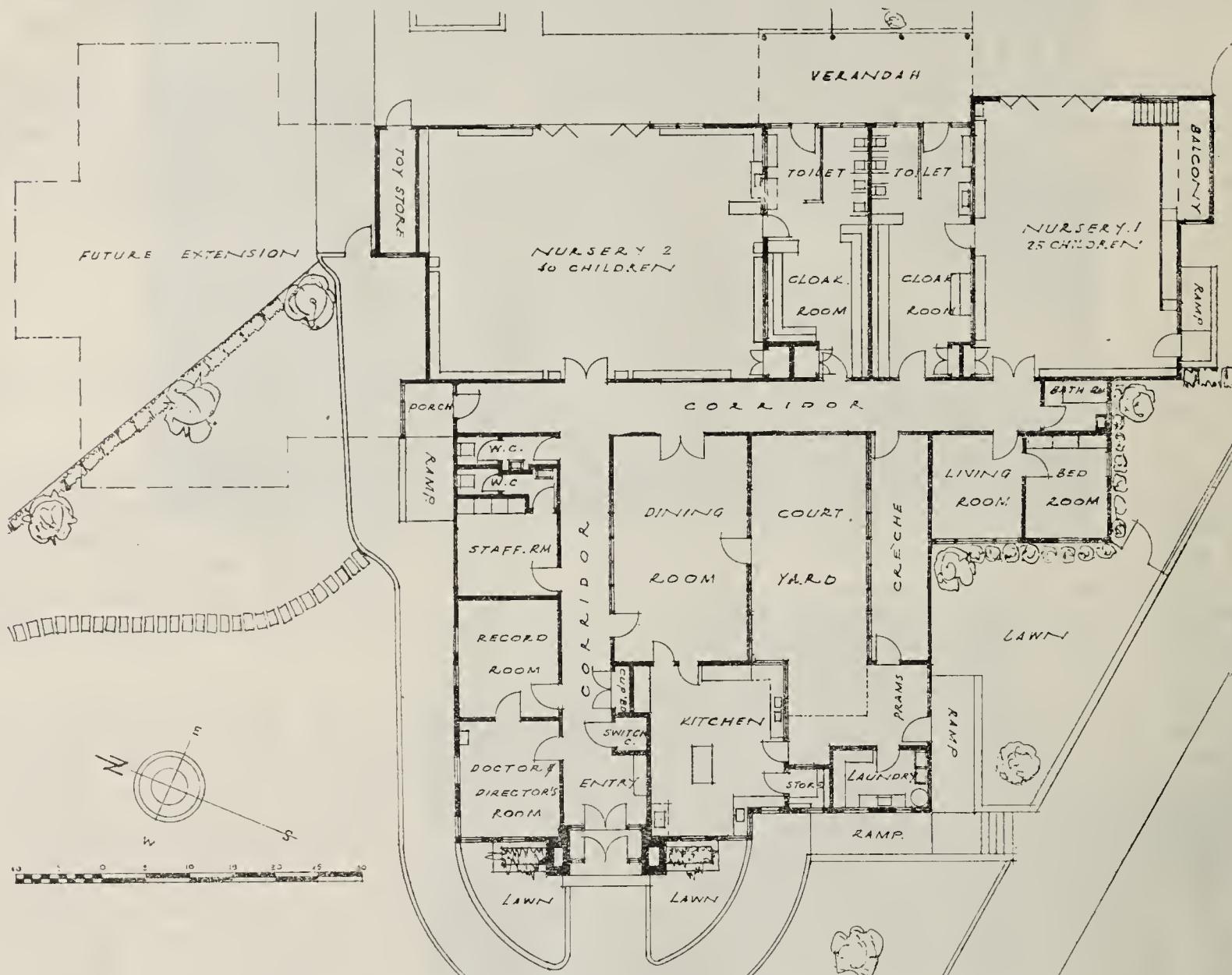
No other new buildings have been undertaken by the Council, but great improvements have been completed in the kindergartens conducted by the Roman Catholic Church, and the playgrounds and facilities of other denominational kindergartens have been equipped and improved.

A survey of existing kindergartens and attendances prepared during the year showed, however, that the need for more kindergartens throughout the City is great, and that, of an estimated population of some 3,500 pre-school children, whose health would benefit by attendance thereat, only some 1,200 are at present accommodated.

Some improvements have been made in the creches operating in the City, but here again, the difficulties of obtaining building materials are likely to hold up the re-constructions and extensions which are necessary.

The amount of milk supplied free, or at a reduced price, was again lower than that distributed last year, the number of families needing assistance having fallen from 415 in 1944 to 365 this year.

It is regrettable that the Council's dental clinics for pre-school children have not yet been re-opened, but it is to be hoped that with the release of dentists from the armed forces and the greater productivity of the Dental College, dental officers will soon be available. Urgent cases were again referred to the children's clinic at the Dental Hospital, to the authorities of which we are greatly indebted.



Plan of Hopetoun Kindergarten - by E. N. Beilby, City Architect.

### INFECTIOUS DISEASES

The outstanding feature of the year was the extension to Victoria of poliomyelitis (infantile paralysis), which was already prevalent in New South Wales and Queensland. The disease had not been reported in epidemic form in any part of Australia since the 1937-38 epidemic, and its appearance was not unnaturally regarded with much apprehension.

It appears, however, that the present epidemic is fortunately different in nature to that of 1937-38. Though some hundreds of cases have occurred in Queensland and New South Wales, and, at the time of writing, over 400 have occurred in Victoria, the age-incidence of the cases differs somewhat from that of the last epidemic, and it appears that the proportion of patients who lose their lives or suffer severe paralysis will turn out to be lower than in 1937-38.

The contrast in Melbourne City is illustrated by the fact that, whereas in 1937-38 there were about 200 cases of paralysis, and almost as many others who were definitely sick without suffering paralysis, in the present outbreak only three cases have been reported in the City.

Other infectious diseases were mild in incidence throughout the year, and the number of diphtheria cases reported reached a new low record. Whilst this is extremely satisfactory, and can be attributed, in part, to the continued and slowly increasing acceptance of immunisation of infants by parents generally, and particularly in the City, I have no doubt that the lower incidence, which was evident in figures for many other parts of the State, was due, in part, to the natural fluctuations in prevalence of the disease, which are not yet understood.

This view is strongly supported by the history of diphtheria in various European countries during recent years. As is well known, the extensive use of immunisation in North America and in France had been accompanied by the most dramatic fall in the occurrence of the disease. In Great Britain and other parts of Europe, however, immunisation was not so widely undertaken, and yet in some countries, of which Norway is an example, the incidence of diphtheria had diminished very greatly. During the early years of the war, extensive immunisation was undertaken throughout Great Britain, and at the same time, diphtheria began to increase in many European countries. Very severe epidemics occurred throughout Europe, with many deaths, and Norway was amongst the countries severely affected. In Great Britain, however, no such increased prevalence occurred.

The present level of immunisation of children in Victoria is not sufficient to guarantee the safety which has been achieved in other countries, and I would repeat the suggestion made in my report of last year, that the Ministry of Health should be approached with a view to the organisation of a widespread campaign of publicity and advertising, in order to stimulate parents to protect their children. This might well involve the establishment of a Publicity Division of the Department of Health, such as has been operating in New South Wales for some years. A Publicity Division would, of course, concern itself with many other matters of health interest as well as that of inoculation against diphtheria.

The City figures of deaths from tuberculosis are again high, although somewhat below the average for the war years, but it is satisfactory to learn that the figures for the State as a whole have fallen to levels below those of war and pre-war years. It is, however, apparent that greater activity in anti-tuberculosis measures would lead to an acceleration of the improvement. The State authorities are fully seized of the facts, and it seems that this will be undertaken as soon as difficulties in connection with new buildings and staffing can be overcome.

## FOOD SUPPLIES

The attached report of the Chief Health Inspector, Mr. T. G. O. Jordan, gives details regarding the activities of his branch during the year, including those of the inspection of food premises, and the examination of foods.

During the latter part of the year considerable public attention was given to articles appearing in the press upon the conditions prevailing in hotel bars, restaurants, cafes, and food premises generally. During the war years there had developed a gradually increasing pressure upon these establishments. With the steady increase in metropolitan population, and the rationing of foodstuffs, more and more people sought to obtain meals and refreshments at public eating houses, and with the shortages of beer and the limitation of hours when beer could be served, increasing pressure, in the literal sense, was exercised upon the hotel bars. The proprietors and managers of these establishments, on their side, were faced with steadily increasing difficulties in obtaining and retaining competent staff, in obtaining supplies and replacements of cutlery, crockery and glassware, and in maintaining the supplies and proper laundering of suitable washable overalls and clothing.

Under these circumstances, some deterioration of standards was inevitable, and presented a situation with which the inspectorial staff, depleted by war service and retirements, found it difficult to deal. The Council has, however, agreed to the appointment of some additional inspectors of whom two were appointed and assumed duties during the year, and, as supplies of civilian goods become available and conditions become stabilised, I confidently anticipate a steady improvement in the conditions prevailing in food premises of all kinds.

The usual regular sampling of the milk supplies was carried out during the year, and the percentage which failed to comply with the standard, 6.9 per cent, is higher than any which has been recorded since 1928. This excess of adulterated samples consisted mainly of milks to which water had been added, and almost all of them were taken during a period of great milk shortage. In spite of this, however, the average composition of the samples, which includes a percentage of fats of 4.13, is well above the standard required (3.5 per cent); and only slightly less than the figures recorded during the last six years. The records show that all the vendors from whom samples are regularly taken supplied milk of a high average quality.

The milk samples submitted for bacteriological examination showed a slight improvement in the extent or degree of bacterial contamination, as compared with the results of the last two years; but, as Mr. Jordan remarks, there is still no sign of the resumption of the gradual improvement which was recorded annually up to the early years of the war.

It is to be regretted that no progress at all has been made in giving effect to the recommendations of the Committee appointed under the Milk Pasteurisation Act, whereby all the milk for Greater Melbourne was to be passed through publicly controlled pasteurisation plants. This is, in my opinion, the only way of ensuring the uniform safety of the commodity. Milk is of such great importance from the point of view of its food value and its potential dangers that the interference with private enterprise involved in the socialisation of its treatment and distribution is surely quite justified. The experience of Wellington has shown that it is possible for a public authority to maintain a continuous supply of a rich, safe, clean product at a reasonable price.

Details of the other foodstuffs examined are included in Mr. Jordan's report.

## HOUSING

For various reasons, very little actual progress has been made under this heading during the year. The shortage of housing accommodation has continued and has probably, indeed, become accentuated as demobilisation of the armed forces has proceeded.

Our thousands of houses unfit for habitation still stand, and are a year older. Fifteen had to be demolished during the year, and urgent repairs were carried out upon some 400 others.

Some progress has perhaps been made in deciding what bodies shall bear responsibility for the urgent housing work necessary in the City: a question which must obviously be decided before even the outline of plans can be prepared. The Town Planning Board, set up under the Town and Country Planning legislation, passed last year by the State Parliament, has at length been appointed, and will presumably become active.

Under that Act local authorities may, and, if required, shall prepare and submit plans for the zoning and future use of their areas. This zoning power formerly resided with the Housing Commission which, however, still retains the power to declare any area a "reclamation area," a procedure which the Commission has already applied to the Molesworth Street area in North Melbourne, upon which it proposes to erect and own blocks of flats, and might well apply to many other areas within the City. The part which the Council itself should play is as yet undecided; but it is encouraging to know that an enthusiastic and competent group of the Council's own officers has been authorised to report upon, and prepare plans for the future of certain of our slum areas.

One cannot, unfortunately, foresee any rapid improvement in the housing conditions for the majority of our citizens. There are still many shortages and difficulties to be overcome in the supply of building materials. Apart from this, as it appears to me, certain fundamental problems have yet to be discussed and decided with regard to the future of the "slum" areas of the City, where the old worn-out houses stand upon their "pocket handkerchief" blocks, which are smaller than the minimum area now allowed for new houses. When these houses are demolished, some change of ownership of the land is inevitable if new houses are to be built. One problem is whether this ownership shall be public or private.

The land, owing to its proximity to the City, is of high value, and if it remains in private ownership and the new houses are built therein, they cannot possibly be rented by many of the relatively poor people who now live there. If the land becomes public property, and some public authority, such as the Housing Commission, builds houses thereon, many of the present inhabitants may be re-housed there only if they are subsidised to live in the new houses. This procedure, namely the building of houses by public authorities and the subsidising of certain families to occupy them, must involve intolerable injustice, because, however great the needs of individual families may be, and whoever chooses them, it is certain that many equally deserving families will not receive any subsidy from the public purse. Such subsidies are justifiable only if their application is universal or is made to specified groups of persons whose qualification is not the subject of arbitrary decision, as is the case, for example, with child endowment. The assistance which is necessary to enable large families to secure the housing accommodation they need could best be made, and is to some extent already made, through the child endowment subsidy.

If, in an area close to the centre of the City, a public authority builds new houses, of good quality and with the necessary amenities—and there can be no justification for building inferior dwellings—these new houses could readily be let at an economic rental, and in the letting it would be reasonable to afford some preference to local residents and probably to other groups such as returned soldiers. Letting at an economic rental could well afford some profit which might be used to assist any displaced persons, who could not afford to rent the new houses, to find and to move into alternative accommodation.

Some of the slums, which are adjacent to institutions such as the University, should be replaced with flats and hostels for which the social demand and economic justification cannot be doubted.

## PUBLIC BUILDINGS

During the year considerable publicity was given to alleged breaches of the Public Building Regulations in relation to fire precautions, the provision of exits, and other matters. The matter was investigated and reported upon by the Building Surveyor and the Medical Officer of Health, and it is understood that a revision of the Regulations is being undertaken by the Public Health Department.

## GENERAL

Full details of all the varied activities of the health inspectors are given in Mr. Jordan's report. The decision of Council, in November, to appoint four additional inspectors is much appreciated. Two of these were appointed and commenced their duties at the close of the year, and I confidently anticipate that when the others are appointed and the full staff has settled down under Mr. Jordan's capable direction, a steady improvement will take place in the supervision and maintenance of the hygiene of the City.

I wish to express my very high appreciation of the work of the whole of the officers and staff of the Department.

Yours faithfully,

JOHN DALE, O.B.E., M.D., B.Sc. (Public Health).

Medical Officer of Health.

# CHILD WELFARE

Health Department,

Town Hall Chambers, Melbourne.

28th March, 1946.

The Medical Officer of Health.

Sir,

I have the honor to report on the child welfare activities for the year 1945.

This year there has been no outstanding achievement in the way of new buildings or new ventures, or in numbers of Health Centre attendants; but the generally satisfactory morbidity rate of the children in the community, and the record low infantile mortality rate is, I feel, an indication of general progress. In visiting the Centres, I can not but compare the average attitude of mind of parents and grandparents to health principles, and the average standard of parenthood, with that of fifteen or more years ago. In our earlier Health Centre work, in addition to parent education and baby care, there was grandparent education to cope with. Ignorance and opposition to our teaching was not infrequently encountered, and in some cases the grandmother was definitely a stumbling block. No doubt it was usually the earnest desire and eagerness to help a married daughter that led such a grandmother to unconsciously hinder or undermine Centre influence by giving advice which was ill-founded, or even, in a few cases, by advising their daughters against attendance. To-day, however, we are beginning to deal with a much more helpful, co-operative and knowledgeable lot of grandmothers, some of whom themselves, as mothers, came to learn and accept help and advice from the Centres, and who now help the Centres by encouraging their daughters to seek and apply the advice of trained people.

What we notice in our own City is indicative of the general advance in knowledge of health essentials throughout other communities. In Victoria many people have contributed to this advance, but outstanding among them is our State Director of Maternal, Infant and Pre-school Child Welfare, Dr. Scantlebury Brown, whose width of vision and vigour inspired her to formulate and carry out an expanding policy of training and education and supervision, and whose personal qualities and genius for co-ordinating the work of different bodies has placed child welfare work in Victoria on such a sure basis. We particularly welcome the setting up in the Maternal and Child Welfare Section of the Public Health Department under the Minister of Health, of a framework which co-ordinates all the activities aiming at complete development of children from the ante-natal period to the school leaving age.

Infantile and pre-school child death rates are influenced largely by epidemics of a severe nature. In the first half of the year there was an epidemic of measles and whooping cough, but complications were rare and no deaths were reported.

Employment, meaning better spending capacity on foods, is also a vital contributing factor in the maintenance of health.

The infantile mortality rate of 26.3 is a record low one and is slightly less than the rate for the whole metropolitan area, and less than that for the State. A comparison is given below of the rate this year with the rates for the last 10 years.

The number of births was a little higher than last year, viz., 1709 as against 1655, well above the average for the last 10 years.

Of the (approximately) 1600 living children aged between one and two years there were 3 deaths, and of the (approximately) 5,000 children aged between 2 and 6 years there were 5 deaths. There was no wastage of child life through accident.

Although the maternal mortality rate was low (only 3 maternal deaths being notified for 1709 births) the wastage here was regrettable, as 3 young married women died following abortion.

TABLE SHOWING VOLUME OF HEALTH CENTRE WORK.

	Council Centres	Training Centre (V.B.H.C.)		Total 1945	
	1944	1945	1944	1945	
No. of new babies .....	1287	1288	331	279	1618
No. of individual babies under 1 year .....	1223	1223	180	149	1403
No. of individual babies between 1 and 2 years .....	1114	1259	67	67	1181
Total No. of individuals under 2 years .....	2337	2482	247	216	2584
Total attendance of babies under 2 years .....	28,456	29,205	3793	3455	32,249
Total attendance of babies under 2 years .....	139	124	9	11	148
No. of new expectant mothers .....	177	161	5	5	182
Total consultations with expectant mothers .....	505	363	17	14	522
Visits by Nurses to babies and mothers .....	4973	4790	653	601	5626
No. of times babies referred to Doctor or Hospital .....	499	564	149	165	618
No. of children new to pre-school sessions .....	597	584	148	135	605
No. of individual pre-school children .....	1581	1399	13	20	1594
Total attendances of pre-school children .....	4830	5195	137	92	4967
Visits (or consultations apart from sessions) re- ferred pre-school children .....	2374	2347	—	—	2374
No. referred to Dental Hospital .....	211	166	—	—	212
No. of pre-school children examined in their own Kindergartens .....	—	—	—	—	440
					385

#### Breast Feeding Records.

Records of 1037 babies at six months of age showed 30.6 per cent to be breast fed with only the addition of an educational diet, 9.6 per cent to be partially breast fed with a complement of some milk mixture and educational diet, and 54 per cent to be artificially fed entirely.

#### Milk and Accessory Foods.

The amount of wet milk supplied through the Centres was 378 pints (which went to a tuberculous patient).

The amount of dried milk supplied through the Centres was 18628 lbs. This was 668 pints less wet milk and 1246 lbs less dried milk than was supplied in 1944. 60 gallons of an iron and vitamin mixture were distributed.

The total number of recipients during 1945 was 429 (belonging to 365 families). 87 individuals (belonging to 73 families) received help continuously throughout the whole year. In 1944 the total number of recipients was 551 (belonging to 415 families). 107 individuals (belonging to 80 families) received help continuously throughout the whole year.

#### Lectures in Mothercraft.

Lectures were given by Sister Shaw to senior girls in 12 schools (State and Roman Catholic). 405 girls sat for the examination. Of these 248 gained certificates of merit, 146 passed the examination, and 11 failed.

#### Training Courses.

Sisters doing their Infant Welfare Course at the Presbyterian Babies Home attended our Centres for instruction and practice in the Centre work required for their course. Twelve Sisters attended during the year.

#### Kindergartens.

The Hopetoun Kindergarten building which was completed at the end of 1944 admitted children at the commencement of the school year. Its design and equipment are up-to-date, and mothers in the district hastened to enrol their children. Each child, before admission, was given a medical examination to ensure freedom from any treatable condition of ill health, so that there should be a minimum amount of absenteeism, allowing each child to receive maximum benefit from its attendance. An "Oslo Lunch" has been served daily, and there has been the usual balanced programme of rest and developmental activities. The kindergarten has been used for observation purposes by interested visitors, and for training of students. All kindergartens in the City (19 in all), including the Lady Gowrie Centre, have continued their developmental work with pre-school children.

During the year there was published at Canberra by Dr. Clements and Miss MacPherson "The Health Record of the Lady Gowrie Centres," a record compiled from observations of nearly 1,300 Australian children of Australian and British parents attending these Kindergarten Centres in the six Capital Cities of the Commonwealth in the course of the previous five years.

In a foreword Dr. Cumpston states that the intention in the establishment of the Centres was that they should serve for demonstration and testing of methods for the care and instruction of pre-school children, and of the problems of growth, nutrition, and development.

The first part of the "Record" is devoted to a statement of the health policy and a description of the general set up of the Health Units and the activities of the medical and nursing staffs. The second part is an analysis of the records, showing incidence of physical defects and abnormalities, appraisement of nutritional status and posture, and frequency of illness and causes of absenteeism. In the concluding chapter, commenting on the findings, it is pointed out that less than 25 per cent of a child's time is spent in a kindergarten centre.

I feel this is a point worth emphasising, for the direct result of kindergarten attendance on a child may not be obvious, and, in fact, often only is so if the indirect influence continues to operate through the home all the time.

Though physical progress is perhaps the prime responsibility of the medical supervisor, just as mental, emotional and social progress is the prime responsibility of the teachers and social worker, the two cannot possibly be divorced, and the medical, teaching, and social staff must work as a whole.

When a child's physical growth is unsatisfactory, the medical supervisor will look carefully, first, for any possible physical cause, but is always aware that causes other than purely physical ones may be operating.

Experience has shown that the most usual causes for an unsatisfactory physical condition are: (1) Insufficient foods of the right kind. (2) Insufficient rest, or over-stimulation. (3) Insufficient fresh air and sunshine. (4) Insufficient exercise. (5) Inability to digest and absorb certain foods, particularly fats. (6) Presence of some focus of infection, from which there is absorption of toxin. (7) Presence of intestinal worms. (8) Unhappiness, anxiety or frustrations, or the lack of the normal mental and physical stimulus to healthy living.

In some children dramatic improvement takes place during kindergarten years. In others physical progress is disappointing. Why this is so, it is not easy to say. In some cases it may be that there are obscure pathological causes which are not found in a routine general examination, but I am inclined to think that these cases are rare, since practically all those whose progress has been unsatisfactory and for which no pathological cause has been found, have shown rapid improvement when sent to the Holiday Home, where full twenty-four hour care is given by trained and experienced people. We have actually used a period at the Holiday Home to help

us in our diagnosis as to the cause of poor physique. "Doubtful" tonsils have sometimes had their fate decided by the child's response to the Holiday Home. For instance, a child whose nutritional progress is unsatisfactory and whose tonsils are regarded as "doubtful" may be sent to the Home with fifteen other children whose nutritional status is also unsatisfactory, but whose tonsils are above suspicion, and who, like the first child, show no cause why they should not gain under good conditions. If the other children (who thus act as controls) improve while the first child fails to do so, we feel that we have reason to regard his tonsils with even more suspicion than before, and a recommendation for tonsillectomy may result.

The fact that the Holiday Home usually gets better results than the average kindergarten with children of poor physical condition may be due to several factors. One of them almost certainly is that care is given for the whole twenty-four hour period in good surroundings, whereas only 25 per cent of whole-day care is given at the kindergarten. Possibly, also, the smaller groups of children at the Holiday Home, being less exciting and aiding better relaxation than the large groups in which children find themselves in kindergartens, are a distinct advantage.

The fact that we fail to get physical improvement in a certain percentage of children does not mean that we think kindergarten life is not of value for such children. Far from that. The experiences children get cannot fail to enrich the quality of their living and have an effect on their general development. But whether improved physical condition can actually be demonstrated depends largely on routines outside the kindergarten. The years of work in the Lady Gowrie Child Centres, for instance, established, as Dr. Cumpston has said, for demonstration and testing of methods, have shown us that kindergarten routine, as it is, does not necessarily result in obviously improved physique. I reiterate that this statement does not detract from the known value of the kindergarten, but does call for thought and conference amongst all those concerned.

We realise that to get the best results, full co-operation of knowledgeable parents is essential, so that 100 per cent and not only 25 per cent of good care is given. One wonders sometimes if we would get better results if we had smaller groups for shorter periods, so that a greater number of children and their mothers could come under more intensive Centre influence.

In that case each individual child would necessarily have less time at a kindergarten, but it would be in a smaller group, under less exciting conditions and the teacher would have more time to spend on the problems of each child and of its parents.

This would mean that the responsibility for the development of every individual child would be thrown more on the parent, but, if every parent achieved a high standard of parenthood, that would be no disadvantage.

One obvious disadvantage of big groups is that some children become over-stimulated and do not relax or sleep for a sufficient length of time. Such children would probably relax better at home during the rest period, provided home conditions were suitable and the mother faithfully observed a sufficient rest time.

In any kindergarten, the Doctor's examinations and advice play only a comparatively small part—the real work with both children and parents is that which goes on constantly day in and day out, by the teaching staff and the Social Worker and the Sister who works with them. They are the ones who see the children in their reactions, and who know the parents well and understand their difficulties. It is their constant work, combined with knowledge and experience and readiness to help, which may eventually alter an unsatisfactory home environment.

We have to remember, however, that parents can only really co-operate if living conditions are such that happy, healthy family life is possible. Conditions for happy living can be procured only by physical food and space for the body, mental food and space for the mind, wholesome recreation for body and mind, wholesome work for body and mind and the physical and mental satisfaction of a thing well done. I fully believe that many of our social problems arise from poor physical nurture, but that more arise from poorer mental and aesthetic nurture.

Food, rest and exercise for the body, food, rest and exercise for the mind, the emotional and mental stimulus of social contacts, the enjoyment of beautiful things both seen and heard, the achievement of things worth while, are all necessary for happy family and community life, and it is only in such circumstances that each individual can achieve full development and complete joy of living. We are proud to be working in the sphere of child development. We feel that much has been achieved, but we often feel intense irritation when we come up against the many factors which undermine the structure of happy family life and for which nothing much is attempted or done.

## MATERNAL MORTALITY

We received notifications of 3 deaths connected with pregnancy or labour, viz:-

Toxaemia, following abortion. (Age 25, married, home duties)  
Septicaemia, following abortion. (Age 27, married, home duties)  
Septicaemia, following abortion. (Age 27, married, home duties)

## INFANT MORTALITY

The number of births notified during the year was 1522, which included 5 sets of twins. The number of infant-deaths notified was 43 (33 of them being neonatal). After allocation to the City by the Government Statist of 187 births and 2 infant deaths, the infantile death rate, as computed by him, was 26.5, the neonatal death rate being 19.9, and the death rate of those between one month and one year being 6.4.

## INFANTILE DEATH RATES

Year	Neonatal (under one month)	Between one month and one year	Total
1935	26.0	23.3	49.3
1936	24.8	29.2	54.0
1937	28.1	13.6	41.7
1938	26.0	13.8	39.8
1939	26.2	10.0	36.2
1940	42.2	11.9	54.1
1941	24.6	12.3	36.9
1942	25.3	18.7	44.0
1943	28.8	14.9	43.7
1944	19.9	12.1	32.0
Average for 10 years	27.2	16.0	43.2
1945	19.8	6.4	26.3

### Neonatal Deaths

The causes of the 33 neonatal deaths were:—

Prematurity	11	Bronchopneumonia	1
Atelectasis	7	Myocarditis	1
Cerebral haemorrhage	6	Imperforate anus	1
Haemorrhagic disease of the newborn	3	Diaphragmatic hernia	1
Cerebral oedema and toxæmia	1	Anencephalus	1

Of the 33 babies who died in the neonatal period, 4 were in twin births, 31 had had regular antenatal attention, 17 were born in private hospitals, 15 in public hospitals, and one in its own home. There were 4 ex-nuptial births (of these two were twins). In the nuptial cases all the fathers were working, and conditions and diet appeared reasonably satisfactory. Fourteen were in first children, 11 in second children; others were in third, fourth and fifth children.

### Deaths between One Month and One Year of Age.

The causes of the 10 deaths notified at this age were as follows:—

Bronchopneumonia	2	Meningococcal septicaemia	1
Paralytic ileus and bronchopneumonia	1	Congenital heart disease	2
Pneumonia and gastroenteritis	1	Congenital heart disease with mongolism	1
Influenzal meningitis	1	Congenital heart disease with prematurity	1

Four of these babies had never attended a Centre, two of them being unknown to the Sisters, and two having been home visited but unco-operative. The other six were Centre attendants. Four of these were congenital heart cases which all showed signs of fairly severe cardiac disability. Of the other two Centre attendants, one was a beautiful breast fed baby who suddenly developed influenzal meningitis, which was treated an hour or two after onset, and the other was a frail baby whose mother needed a great deal of mothercraft help.

### Deaths between One and Two Years of Age

The cause of the 3 deaths notified at this age were:—

Gastroenteritis (Attended the Centre and the Children's Hospital fairly regularly).  
Congenital mental deficiency and pulmonary congestion (Not known to the Centres).  
Bronchiopneumonia, gastroenteritis and measles (Not known to the Centres. Was an inmate of an institution).

### Deaths in Children between Two and Six Years of Age

The causes of the 5 deaths notified at this age were:—

Meningococcal septicaemia (2 years. Attended Centre fairly regularly).  
Tonsillitis and bronchitis (2 years and 4 months. Attended Centre till 18 months of age).  
Meningitis, bronchiolitis and mediastinal adenitis (3 years. Attended Centre till about 2 years of age).  
Status lymphaticus (5 years. Not known to the Centres).  
Tumour of the kidney (5 years. Attended Centre till about 4 years of age).

### ACKNOWLEDGMENTS

I wish to thank Dr. Bull for her continued supervision of the children at Pigdon Street, and also record appreciation of the excellent work of all the Sisters, and of the assistance so generously given by the voluntary helpers.

HILDA E. KINCAID, D.Sc., M.B., B.S.

# INFECTIOUS DISEASES

Health Department,

Town Hall Chambers, Melbourne.

1st May, 1946.

The Medical Officer of Health:

Sir,

I have the honour to submit a report on the incidence and control of infectious diseases in the City of Melbourne for the year 1945.

## DIPHTHERIA.

TABLE I.

Year	No. of Cases	Cases per 100,000	Deaths	Case Fatality	Fatality per 100,000
1915-24 (average) .....	373	355	14	3.7	13
1925-34 (average) .....	230	239	6	2.9	7
1935 .....	257	266	7	2.7	7
1936 .....	241	259	5	2.0	5
1937 .....	127	137	2	1.5	2
1938 .....	103	111	1	1.0	1
1939 .....	110	118	2	1.8	2
1940 .....	100	106	2	2.0	2
1941 .....	235	246	9	3.8	9
1942 .....	56	59	1	1.8	1
1943 .....	48	48	3	6.2	3
1944 .....	71	71	3	4.2	3
1945 .....	35	34	1	2.8	1

The number of cases of diphtheria in 1945 was extraordinarily low. For the fourth year in succession there have been less than 100 cases. However, it must not be forgotten that there were 235 cases in 1941, and that we are probably still feeling the benefits of the rush for immunisation during that year, due to the alarm of the community, stimulated by a most unusual but very helpful press campaign. In the good years there is a renewed tendency among parents to "risk it" and neglect to have their children protected, and unless the campaign is kept up, other epidemics will surely follow. It is reassuring to know that the immunization in the Health Centres is maintaining a high level, although, owing to the illness of the officer in charge, less work was done in the last quarter of the year. However, all those who missed are now being picked up, and the effect of pre-school immunization, which has been shown all over the world to be the crucial factor in the case, should ensure that the disease should not be able to run wild through the community again. The figures for the last three year periods are gratifying, but still not comparable with the startling reduction shown in New York and other American and Canadian cities, and education of the public in the principles of immunization is still necessary. The ten year average figures are as follows: 1915-24, 373; 1925-34, 230; 1935-44, 134. Immunization was commenced in the City late in the year 1925.

### Incidence.

The incidence of diphtheria, as has been shown above, is the lowest ever recorded in the City, and that at a time when there was an influx of population, and overcrowding was rife in all areas. There were 35 cases, 19 in males and 16 in females.

### Deaths.

There was one death, in a boy of 6 years of age, whose case had remained undiagnosed for weeks. He was moribund when admitted to hospital, and undoubtedly the long delay in obtaining treatment was the cause of the fatal issue. He had not been immunized.

### Rates.

The rate per 100,000, of cases of diphtheria, was 34.6, the lowest ever recorded. The rates for the nine adjoining municipalities varied considerably, only two being lower than that for the City, and the average, 84.5, is more than double the City rate. The rate for the metropolitan area, and the whole of the State is also higher than the City rate, so that for three out of the last four years our figures have been lower than those for the adjoining municipalities, the metropolitan area and the State, as is shown by the following table:—

	1942	1943	1944	1945
Melbourne City .....	59	48	70.6	34.6
Nine Adjacent Municipalities .....	101	64	68.8	84.5
Greater Melbourne .....	65	50	53.8	51.0
Whole State .....	68	67	62.4	44.9

TABLE II.

## AGE INCIDENCE

AGE	MALES	FEMALES		Percentages
0-1 year	—	—		
1 year	1	—		
2 years	2	—		
3 years	1	—		
4 years	2	2		
5 years	1	3		
6 years	8	3		
7 years	1	—		
8 years	1	3		
9 years	1	—		
10 years	—	1		
11 years	1	—		
12 years	—	—		
13 years	—	2		
14 years	—	—		
15 years and over	—	2	0 males, 2 females	6%
Totals	19	16	35 cases	

## INSTITUTIONAL CASES

There were only 3 institutional cases during the year, an unusually low figure, even considering the low incidence. It was only 8.5 per cent., while the average percentage of institutional cases for the previous ten years is 18.

TABLE III.

## NUMBER OF INSTITUTIONAL AND GENERAL CASES

Year	Total	Institutional	General
1931	308	27	281
1932	310	40	270
1933	307	86	221
1934	215	30	185
1935	257	38	219
1936	241	21	220
1937	127	9	118
1938	103	22	81
1939	110	53	57
1940	100	37	63
1941	235	15	220
1942	56	12	44
1943	48	21	27
1944	71	11	60
1945	35	3	32

It will be seen from the above table that the figure 32 is higher for general cases than that in 1943, which was only 27 for the whole City. Undoubtedly the protective measures carried out in institutions, with the co-operation of the authorities, have been of great value in reducing institutional infections.

## Diphtheria in Families.

There were two instances of more than one case occurring in families; each had two cases. In several instances the affected child was one who, for some reason, had escaped immunization at the time when other members were being treated.

## Diphtheria in Individuals previously treated.

There was one case of diphtheria in a child who had received two doses of A.P.T. She had very large tonsils and was subject to tonsillitis, and in this case showed a positive swab. It may well have been a mixed infection. Another girl, who was reported to have been tested and found negative in an institution, was reported to have a mild infection, as was another girl who had received only one dose, and could not expect to be protected. There were no deaths among immunized children.

## Swabs in Diphtheria Contacts.

208 swabs were taken from contacts of cases of diphtheria; 201 were negative and 7 positive.

## IMMUNIZATION.

Immunization was carried out principally in Health Centres and institutions. As announced last year, immunization in the schools was dropped for this year, as the majority of children whose parents are willing to co-operate is treated before they go to school, and the numbers who need treatment are a very small proportion of those who attend the sessions at school. However, these serve two purposes: they act as a check on previous immunization, showing whether the treatment was effective and lasting, or whether a maintenance dose is necessary, and we are able to pick up children who have missed protective treatment. It is proposed to take up the work again next year. The prophylactic A.P.T. is used exclusively for the younger children, and anatoxin for older children and for adults. At one of the large institutions for children, a combined prophylactic against diphtheria and whooping cough has been given for the last few months, and if this is effective it should be of great value in treating infants at Health Centres. If an infant can be protected against both these diseases at once, a great deal of time and discomfort could be avoided.

### Immunization in Health Centres.

The figures for immunization in Health Centres for the last five years are as follows:—

Year	Total Individuals	Immunized			Two or three Doses
		1	2	3	
1941	1462	73	136	980	1116
1942	1139	76	452	47	499
1943	1198	85	638	—	638
1944	1116	79	668	—	668
1945	1224	74	864	—	864

The number of infants attending for immunization at the Health Centres is very gratifying, particularly as the sessions were much reduced during my illness.

### RE-TESTS

In 1943 results were published of re-tests of 292 children in the Health Centres, three months after they had received two doses of alum-precipitated toxoid. Only 8 showed any reaction, indicating that immunization was not complete—about 98 per cent effectiveness. It was resolved to leave an interval of six months in future between the testing and the completion of the course, and the results of such re-tests are available for 580 cases. Of these, only 18 showed any sign of reaction to the Schick test, most only faint, and all were combined with sensitivity to the Moloney test. If the sensitivity is sufficient to suggest that further treatment is inadvisable, the usual procedure is to test again in six months, by which time most cases have become immune. The high measure of success, 97 per cent is a tribute to the efficacy of A.P.T. as a prophylactic.

TABLE V.

HEALTH CENTRES—	Total	Schick	Schick	Not	Not	Immunized	
	Presenting	Negative	Positive	immunized	recorded	1	?
Town Hall, North Melbourne	178	51	8	7	4	17	99
Pigdon Street, North Carlton	92	10	2	2	—	6	74
Abbotsford St., Nth. Melbourne	156	59	4	3	—	11	92
Swanston Street, Carlton	261	59	7	5	—	21	176
Kensington	229	20	3	1	—	8	200
The Oaks, South Yarra	85	11	2	1	—	2	71
Newry Street, North Carlton	223	53	10	5	4	9	152
Totals	1224	254	39	24	8	74	864

### INSTITUTIONS & HOSPITALS—

Children's Hospital	64	32	32	5	—	1	26
Royal Melbourne Hospital	175	92	83	4	—	2	77
Alfred Hospital	83	48	35	3	—	—	32
Children's Welfare Department	252	103	88	1	49	37	89*
Institution for Blind	24	14	10	4	—	—	6
Deaf and Dumb Institute	25	20	—	—	1	—	4
St. Mark's Kindergarten	25	15	10	1	—	5	4
University Students	80	40	35	4	—	11	20
Totals	728	364	293	22	50	56	258
Grand Totals	1952	618	332	46	58	130	1122

\* Including 48 doses of combined whooping cough and diphtheria prophylactic.

### SCARLET FEVER.

For the first time for eight years the figures for cases of scarlet fever in the City show a marked drop.

TABLE 1.

Year	No. of Cases	Cases per 100,000	Deaths	Case Fatality	Deaths per 100,000
1931	246	256	3	1.2	3
1932	209	222	1	0.5	1
1933	131	142	1	0.8	1
1934	100	108	—	—	—
1935	73	77	—	—	—
1936	70	75	—	—	—
1937	50	54	—	—	—
1938	202	217	1	0.5	1
1939	325	348	1	0.3	1
1940	244	260	1	0.4	1
1941	240	251	—	—	—
1942	152	159	—	—	—
1943	285	287	2	0.7	2
1944	229	228	—	—	—
1945	76	75	1	1.3	1

### Incidence.

There were 76 cases of scarlet fever in the City, 29 in males and 47 in females. There was one death, in a woman of 40, who died after some time, from complications due to the infection.

### AGE INCIDENCE OF SCARLET FEVER.

TABLE 11.

Age	Male	Female	Percentages		
0-1 year	—	—			
1 year	2	3			
2 years	5	2			
3 years	5	3			
4 years	3	5			
5 years	3	4			
6 years	2	1			
7 years	1	4			
8 years	3	1			
9 years	—	—			
10 years	—	—			
11 years	1	—			
12 years	1	4			
13 years	—	1			
14 years	—	—			
15 years and over	3	19			
Totals	29 males	47 females — 76 cases.			

The high incidence of scarlet fever among females in the young adult section is again apparent.

### Scarlet Fever in Institutions.

Twelve cases of scarlet fever occurred in institutions, 7 in public hospitals, 6 among members of the staff, and 1 in a child of 5; and 5 cases occurred in a children's institution. Last year there were 33 institutional cases.

### Swabs in Scarlet Fever contacts.

36 Swabs were taken from contacts of cases of scarlet fever; 30 were negative and 6 showed presence of haemolytic streptococci, Group A.

### CEREBRO-SPINAL MENINGITIS

The incidence of cerebro-spinal meningitis was again low compared with the figures of the early war years. There were 10 cases, 5 male and 5 female, with 3 deaths. Six cases were in children under 5 years of age, 4 males and 2 females, with 2 deaths, both males. In the age group 5 to 9, there was one case in a boy of 6, and the three other cases were in adults of whom one, a woman of 27, died.

The figures for the last five years are as follows:—

Year	Cases		Deaths		Totals	
	Male	Female	Male	Female	Cases	Deaths
1941	10	4	1	—	14	1
1942	28	18	4	5	46	9
1943	15	11	7	2	26	9
1944	5	3	2	2	8	4
1945	5	5	2	—	10	2
Totals	63	41	16	9	104	25

## Inquiries into Social Conditions of Families Visited on account of Infectious Diseases.

The number of families visited in 1945 was only 98, reflecting the low incidence of infectious diseases in the City during the year. In 1944 and 1943 the number was over 230, in 1942 the number was 153, and in 1941, 250. The numbers this year are too small to be very significant; but are presented from year to year for comparison. Records are available for 98 families, and do not include cases in institutions or boarding houses. In 34 instances diphtheria was present, in 55 scarlet fever, and in 9 cerebro-spinal meningitis.

Altogether 512 people, 284 adults and 288 children, lived in 429 rooms, an average of nearly 1.2. In the families of diphtheria cases, 97 adults and 96 children lived in 151 rooms, an average of nearly 1.3 per room. This provides some evidence of overcrowding, as it has always been observed that scarlet fever is less confined to the poorer areas than is diphtheria, so the proportion of families in overcrowded areas is low and unrepresentative.

Of the 43 houses where diphtheria or cerebro-spinal meningitis occurred, only 13 or 30 per cent were considered good, and 30 or 70 per cent bad or indifferent.

Of the 55 houses where scarlet fever occurred 26, or nearly 50 per cent, were considered good, and 29, over 50 per cent, bad or indifferent.

In the 98 families, the head of the family was unemployed in only 3 cases, and these were invalid pensioners.

About 30 per cent of the adults in the families visited were in the Services.

Nearly half the cases of infectious disease occurred in people who had lived in the City for under five years, 14 per cent having had less than a year's residence here. The figures for the earlier War years for those who had been less than one year in the City were much higher, 28 per cent in 1941, 20 per cent in 1942, and about 10 per cent for the years 1943 and 1944.

The number of children amongst the cases and contacts for the three diseases, who had been immunized against diphtheria, was 99, out of 228 children, or about 43 per cent. This figure is lower than for last year, when it was 50 per cent, and also below the average of about 60 per cent. Many of these families were not regular Centre attendants, and not very conscious of their responsibility in regard to health matters.

There had been 13 previous cases of scarlet fever, and 11 of diphtheria among the families visited.

## TUBERCULOSIS

The total number of patients suffering from tuberculosis under supervision during the year was 389, a drop from the figure of 430 for 1944 but still above the figures for the early war years.

TABLE I.

Year	Number of Cases
1939	311
1940	311
1941	398
1942	350
1943	393
1944	430
1945	389

TABLE II.

## AGE DISTRIBUTION

Years	Male	Female	Totals
0-4 years	2	—	2
5-9 years	2	1	3
10-14 years	2	1	3
15-19 years	7	6	13
20-24 years	18	22	40
25-34 years	38	59	97
35-44 years	42	45	87
45-54 years	41	31	72
55-64 years	37	10	47
65 and over	19	3	22
Age unknown	2	1	3
Totals	210	179	389

The number of cases among younger women is, as usual, again in excess of the males of the same age period.

## DEATHS FROM TUBERCULOSIS

The number of deaths from tuberculosis in 1945 also shows that the upward trend, observed during the war years, has apparently been arrested. Though higher than for the ten year average before the war years, the figure, 72, is slightly below that of the average for the five war years, which was 76.

TABLE III.

Years	No. of deaths
1925-1929 (average annual number)	86
1930-1934 (average annual number)	66
1935-1939 (average annual number)	57
1940	88
1941	68
1942	67
1943	75
1944	85
1945	72
	Average for five years 1941-1945 — 76

Of the 72 deaths from tuberculosis, 50 were in males and 18 in females, compared with 85 in 1944, 58 in males and 27 in females. Of these, 65 were due to the pulmonary form of the disease, 49 in males and 16 in females; 7 were of the non-pulmonary type, 5 in males and 2 in females, and of these, 2 were due to tuberculous meningitis, 1 male and 1 female. 3 died in sanatorium, 36 in hospital and 33 in their own homes.

Sixteen had been known to the Health Department for less than a year, 20 between one and five years, 11 between five and ten years, 4 over ten years, and 21 were not known to be tuberculous until after death.

As an indication of the rate of progress of the fatal cases, 6 had been ill for less than a year, 31 between one and five years, 24 between five and ten years, and 11 over ten years.

TABLE IV

### AGE DISTRIBUTION OF FATAL CASES

Age	Male	Female	Totals
0-4 years	—	—	—
5-9 years	—	—	—
10-14 years	—	—	—
15-19 years	1	1	2
20-24 years	—	2	2
25-34 years	7	8	15
35-44 years	9	3	12
45-54 years	18	1	19
55-64 years	8	2	10
65 years and over	11	1	12
Totals	54	18	72

### NEW CASES.

There was an extraordinary drop in the number of new cases that were reported to the department. Inquiry from all the practitioners in Melbourne failed to reveal that this was in any way due to the failure of busy practitioners to report cases; but it is possible that a number of cases "under observation" awaits confirmation, and cannot be regarded as definite until further tests are made.

Only 68 new cases came under notice during the year, 42 in males and 26 in females. In 1944, the figure was 149; and in 1943, 151. Of these 68 cases, 15 died during the year. In addition, 21 deaths from tuberculosis were notified in people who had never been reported as cases of tuberculosis.

### SANATORIUM ADMISSIONS.

20 cases were admitted to Sanatoria—7 males and 13 females, including 4 males and 4 females admitted to the Central Hospital.

### SPUTUM TESTS.

389 sputum tests were made, of which 115 were positive, 68 in males and 47 in females.

### CHILD CONTACTS.

144 children under 14 were living in contact with cases of tuberculosis. In 35 houses where there was an open case, with positive sputum, there were 55 children. Of these, 13 were under five years of age, 26 were between five and ten years, and 16 were between ten and fourteen years of age.

In the previous five years, the figures for child contacts of cases of tuberculosis were as follows:—

Year	Number of Children in contact with notified cases	Number of Children where Positive Sputum
1940	199	72
1941	169	48
1942	183	53
1943	196	60
1944	188	68
1945	144	55

### MICRO-PHOTOGRAPHY IN A FACTORY

In July last year we received a communication from the head of a City firm asking for advice. They had lost eight employees in the last five years from tuberculosis. In the current year there had been three new cases in the workroom, and two in the office staff. Five had died during the period, and three were still under treatment, two in sanatoria. After exhaustive inquiries, most of the cases seemed to have occurred in contact with one woman in the workroom. Apparently she had been infected by her husband, a soldier from the last war, whose first wife had died of tuberculosis. She had been in sanatorium for some time; but left against advice and returned to work. She appeared so ill that the firm pensioned her off, and she died a few months later; but it is probable that two of her workmates picked up the infection during the period of her return.

Patch tests and micro-photographs were, with the cordial co-operation of the management, carried out on the whole personnel. Fifty-seven Patch tests showed thirteen positive results; but the micro-photographs at the Central Tuberculosis Bureau revealed only one suspicious case. After further investigation it was decided that no active disease was present. Advice was given to all the employees, and it is hoped that there will be no further trouble.

### TYPHOID FEVER

There was one case of typhoid fever, in a woman of 29. In endeavouring to trace the source of infection, a number of very interesting clues were followed, but we were unable to find a carrier among the contacts of the case. She herself regularly visited a country town, but inquiries there did not reveal any case for many years. All the other members of the household had complained of recent enteritis. One was an airman just back from abroad, another a service woman whose work was to look after returned men on hospital transport, another a woman who had recently visited a country guest house where cases of enteritis had occurred. All had Widal tests performed, and examination of excreta was carried out by the Pathological Department of the Melbourne Hospital, but, to our disappointment, no significant results were obtained.

There was also a case of para-typhoid infection in an infant under twelve months of age.

### POLIOMYELITIS

Melbourne City has been singularly fortunate during the recent epidemic of poliomyelitis. As it was eight years since the last outbreak, children under this age might have been expected to be susceptible to the disease, but up till the end of the year only three cases had been reported. Two were in boys aged 9 and 4 years, and one in a girl of 8 years. The older boy was discharged from Fairfield in a Thomas splint, and there was a history of fairly severe illness. The younger boy had some slight fever, and it was found that he fell over when he got out of bed. He was also sent to Fairfield. Both are still under treatment. The girl had a mild "dromedary" attack, and slight paralysis was discovered in the hand when she tried to play the piano. An interesting fact was that she had received dental attention within the incubation period. In view of the connection between tonsillectomy and infection with poliomyelitis, the questions of whether fillings or extractions of teeth during an epidemic could possibly be a source of danger, has attracted some attention.

There was also a Service case in a member of the W.A.A.A.F. aged 20 years, who was treated in a military hospital. She had been resident in a Service hostel in the City.

### ANKYLOSTOMA DUODENALE

There was one case of hookworm disease in an Italian aged 56 years who had lived in Queensland for 16 years.

### BACILLARY DYSENTERY

There were two cases of bacillary dysentery in nurses at a public hospital, both aged 20 years.

### MEASLES AND WHOOPING COUGH

There was one death from measles, in an infant who was an inmate of an institution for children. There had been a fairly severe prevalence of the disease, and this child, who was very frail, contracted pneumonia and died.

Whooping cough was also prevalent, but there were no deaths. The use of the sulpha drugs and penicillin in severe complications may be expected to effect a drastic reduction in the mortality from both measles and whooping cough.

In addition, there has been a great deal of immunization against whooping cough. Quite a considerable number have been attended by private doctors, and in response to requests, sessions were held at the Health Centres. 99 children attended, of whom 86 received 4 doses. At an institute for children, a combined prophylactic against whooping cough and diphtheria has been given for some months. The results have been very satisfactory in the almost entire absence of reactions, and it is hoped to prove, by Schick tests and blood tests for agglutination, whether it is effective as an immunizing agent. In experiments with animals, it has been shown to be very effective, and we are greatly indebted to the Director of the Commonwealth Serum Laboratories, and to Dr. Adey for the opportunity of using the material.

#### ACKNOWLEDGMENTS

I wish to express my appreciation of the work of Sister Dossetor, my assistant in the infectious diseases section, of the nursing and clerical staffs, and also of the Head Teachers and infant mistresses for their sympathetic co-operation in the schools.

HILDA W. BULL, B.Sc., M.B., D.P.H.

# PSYCHOLOGICAL SURVEY IN A NURSERY SCHOOL

During the last three years I have had the privilege of attending the Psychiatric Clinic at the Children's Hospital as assistant to Dr. Williams, and in his absence Dr. Phillips, and as it had been decided to drop immunization in the schools during 1945, it seemed a good opportunity to apply some of the experience gained there to a survey of the psychological problems in the Nursery School at Pigdon Street.

This school, established by the Council in collaboration with the Education Department in 1929, is in a unique position, as the Health Centre, Nursery School and Infant School are all accommodated in the same building, and the pre-school children are under observation from birth until they attain the age of six years. There is very close co-operation between the medical staff of the Health Centre and the teachers at the Nursery and Infant Schools, and the Sister in charge is regularly available for consultation with the teachers. The Education Department has been very co-operative in allotting specially trained and gifted teachers to the work of the Nursery School.

It was decided to make a preliminary survey to ascertain the nature and variety of behaviour problems in this small sample of 50 children, aged from 2½ to 5 years, and to do intelligence tests on all the pupils of the school. The Binet-Terman, and where necessary Merrill-Palmer tests were used, and we were fortunate to have the assistance of Mrs. Alan Murray, who as Lucy Barling had been a pioneer of child psychology in Melbourne. It was felt that although the testing is usually done by a psychologist, it is of great value to the medical officer to be familiar with these tests and to be able to apply them and observe the behaviour of the children under test conditions.

The other side of the work was the interview by the medical officer of the mothers of children attending the Nursery School and the Health Centre. We have a form based on that of Kanner, the American psychologist, and all relevant information is collected in a systematic way. With these family problems, the attitude and personality of the parents is of vital importance, and psycho-therapeutic methods often necessitated many interviews for advice and consultation with parent and child. Children needing guidance were handed on to the Nursery School, and the work done by the teachers usually resulted in marked improvement in their condition.

## CHIEF PSYCHOLOGICAL PROBLEMS

Any statistical data on behaviour problems in such a small number would, of course, have little validity; but it was rather surprising to find the number and range of these problems, especially when the problem-parents were considered also.

Home conditions, overcrowding, particularly of sons and daughters and grandchildren all under the one roof, made a normal healthy, happy life almost impossible for many children. Some were over-indulged, spoiled, self-assertive, others over-disciplined, punished and intimidated, and a considerable number of parents showed signs of over-strain and were too neurotic to be able to deal wisely with their children.

The behaviour problems, and it was only in cases where the condition was sufficiently marked to constitute a real problem that we made a note of them, showed considerable variety. Feeding and sleep problems, habits such as nail-biting, head-banging, thumb-sucking, were among the most frequent conditions; violent tempers, tantrums, night-terrors, occurred in others; some were destructive, spiteful and cruel, the latter usually among those of limited intelligence. Fears, lack of confidence, on the one hand, and exhibitionism on the other, were frequently noted. Speech difficulties were common with occasional stammering; jealousy of siblings often led to violent misbehaviour. Several children showed left or undecided handedness, one or two were slightly deaf and had been considered dull, and two asthmatic children, despots in their own home, were much improved by school discipline.

The intelligence tests, though always to be used with discretion, proved a very useful guide. Though an observant teacher can form a very fair idea of a child's mental equipment, there are many pitfalls. The active restless talkative child, whose intelligence might be quite low, often appears bright, and suffers continually through not being able to live up to what is expected; the badly-handled child who appears almost mentally defective might be of high intelligence, and this information is of great value in approaching the problem of re-adjustment. If a child is known to be of limited intelligence the best use can be made of what capacities it may possess, instead of trying to make it conform to a pattern, and so on.

A more detailed report will be given later and it is hoped to extend the work as opportunity offers.

Although the work was necessarily tentative and exploratory and was interrupted during the latter half of the year by my absence on sick leave, sufficient evidence has been accumulated to indicate that psychiatric supervision of children during the pre-school years can be of great value. In consultation with the teachers, the child's whole future can be influenced and much unnecessary strain, unhappiness and frustration avoided.

HILDA W. BULL

# REPORT OF CHIEF HEALTH INSPECTOR

Health Department,

The Medical Officer of Health:  
Sir,

Town Hall Chambers, Melbourne.  
11th March, 1946.

I have the honour to submit a report for the year 1945 upon the varied activities of the Department, which are governed by the provisions of the following Acts and Regulations.

## ACTS AND REGULATIONS

### Acts:

Health Acts, Slum Reclamation and Housing Acts, Local Government Act, Factories Acts, Police Offences Acts, Melbourne and Geelong Corporation Act, Goods Act, Births Notification Acts, Sale of Horseflesh Act.

### Regulations under Health Act:

Registration, Rat Destruction, Hairdressers' Shops, Offensive Trades, Seizure (Claims), Eating House, Camping, General Sanitary, Analysis, Septic Tanks, Cattle Sale Yards, Infectious Diseases, Cleanliness (Food), Food and Drug Standards, Nightsoil, Smoke Abatement, Tobacco Packages, Stream Pollution, Fire Prevention, Building (Tent), Boarding and Lodging Houses.

### Other Regulations:

Housing (Standard of Habitation) Regulations, Regulations under the Goods Act.

### By-Laws and Regulations:

By-Laws and Regulations of the Council relating to Places of Amusement, Public Buildings, Dancing Saloons, Fowl Yards, etc., are also administered by the Department.

## HOUSING

In the matter of housing, we are still meeting with considerable difficulty resulting from the continued scarcity of materials and labour, and little if any progress has been made in the bringing of existing housing up to the standards of the Habitation Regulations. So far as Slum Reclamation is concerned, nothing whatsoever has been accomplished. Unless some drastic improvement is made in the near future with regard to the supply of materials many of the houses at present under orders will have deteriorated to such an extent that they will be more or less uninhabitable. In spite of the difficulties, however, every effort has been made to maintain such existing houses as have come under our notice in a reasonably weather-proof and habitable condition. Most of the latter work has been erected under the provisions of the Health Act.

In addition to work under the Slum Reclamation and Housing Acts several surveys of areas in Carlton and North Melbourne have been carried out and 190 houses have been reported upon in detail.

### Houses dealt with under the Slum Reclamation and Housing Acts:

Acting as agents for the Housing Commission 627 inspections and re-inspections for work in progress have been carried out. The number of statutory reports submitted to the Commission was 95, dealing with houses of which 70 were classified in List "A" for demolition and 25 in List "B" to be made to comply with the Regulations. The number of reports forwarded included 62 made at the request of a Trustee Company to enable them to wind up a deceased estate, and of the houses concerned 53 were reported as only fit for demolition and 9 could, with extensive repairs, be made to comply with the standard.

The following table shows the action recommended regarding the houses "reported" and the number in each area:

TABLE I.  
HOUSES REPORTED

	City	E. Melb.	S. Yarra	Carlton	N. Carlton	W. Melb.	N. Melb.	K'sington	Fitzroy	Total
Demolition	—	—	—	25	2	3	37	1	2	70
Repairs	—	—	—	12	6	2	2	3	—	25

On the instruction of the Housing Commission notices affecting 10 properties were issued together with the required affidavit to the owner. Second notices were issued of such premises. This involved the prosecution of Mr. J. N. D. a lessee of 7 properties, 7½ a owner, 3 on mortgagees and one on an occupier. Of the notices affecting the properties, 10 were for demolition and 21 were to be remedied in compliance with the regulations. Following the practice of recent years, deterrence was granted to the owners of the premises to be demolished on their undertaking to effect such urgent repairs as were specified, and in the case of houses which could be

made to comply with the Regulations, if the owners undertook to carry out the urgent repairs specified, all other requirements necessary to comply with the Regulations were deferred for a period of two years. The nature of the Notices issued, together with the areas affected, are set out hereunder in Table II.

TABLE II  
NOTICES ISSUED

	City	E. Melb.	S. Yarra	Carlton	N. Carlton	W. Melb.	N. Melb.	K'sington	Flem'ton	Total
Demolition	—	—	—	11	—	3	4	—	—	18
Repairs	—	—	—	12	4	2	2	1	—	21

Compliance with these and Notices previously issued has been effected in 20 instances, 13 of the premises having been demolished, and 5 were brought up to the standard required by the Habitation Regulations. Urgent repairs have also been carried out where required as a condition of deferment and work at other premises is in course of progress, although in a somewhat desultory manner. The latter phase occupies much of the Inspectors' time in the making of re-inspections, to ensure that the work is carried out in accordance with the specifications. The areas in which compliance has been effected are shown in the following table:

TABLE III.  
COMPLIANCE WITH NOTICES

	City	E. Melb.	S. Yarra	Carlton	N. Carlton	W. Melb.	N. Melb.	K'sington	Flem'ton	Total
Demolition	—	4	—	3	—	—	6	—	—	13
Repairs	—	—	—	2	2	—	—	—	—	5

The total numbers of houses reported, of Notices served and of compliances in the several areas since the coming into operation of the Housing legislation in 1940 is shown in the following tables:

TABLE "A"  
HOUSES REPORTED SINCE MAY, 1940

	City	E. Melb.	S. Yarra	Carlton	N. Carlton	W. Melb.	N. Melb.	K'sington	Flem'ton	Total	
Demolition	—	22	—	1	183	35	19	226	23	8	517
Repairs	—	—	2	2	53	34	38	69	13	4	215

TABLE "B"  
NOTICES SERVED SINCE MAY, 1940

	City	E. Melb.	S. Yarra	Carlton	N. Carlton	W. Melb.	N. Melb.	K'sington	Flem'ton	Total	
Demolition	—	22	—	1	136	30	14	143	9	5	360
Repairs	—	—	2	2	45	34	35	41	9	5	173

TABLE "C"  
COMPLIANCE WITH NOTICES SINCE MAY, 1940

	City	E. Melb.	S. Yarra	Carlton	N. Carlton	W. Melb.	N. Melb.	K'sington	Flem'ton	Total	
Demolition	—	10	—	—	101	10	15	85	1	—	222
Repairs	—	—	1	1	17	13	7	14	3	1	57

With regard to the re-housing of families likely to be disturbed as a result of demolitions etc., the present system or policy allows of the re-housing in only a very restricted number of such families. This is reflected from the return, received from the Commission, of families re-housed last year. Out of a total of 50 such families, consisting of 100 adults and 117 children, only 4 of such families, consisting of 8 adults and 19 children, came from premises that had been reported within the City for either demolition or repair. The total number of families re-housed from the City area since 1940 is 226; consisting of 321 adults and 333 children.

#### Housing under the Health Act:

In addition to the work under the Housing Acts, 420 defects of houses, such as leaking roofs, dampness in walls, defective sanitary fittings, defective drainage, etc., have been dealt with under the Health Act and Notices were served on the owners of the properties to effect such urgent repairs as were specified. Repairs and renovations have been effected in 378 instances and work was in progress at the other premises at the close of the year. The total number of demolitions of dwellings within the City during the year, including those demolished voluntarily for factory extensions etc., was 15, and a total of 349 since 1940.

#### FOOD AND FOOD PREMISES

In addition to the regular inspections of eating houses and premises where aerated waters, ice cream, cordials, etc., are manufactured and which number 484 and 255 respectively, supervision was effected over the other 2424 food premises throughout the City which are not subject to registration and include such premises as hotels, grocers, greengrocers, butchers, delicatessen, small-goods and confectionery shops, and food factories. These premises generally were found to be well maintained and in reasonable conformity with the Health Acts, considering the difficulties experienced in effecting renovations and repairs.

The man-power problem and the employment of inexperienced personnel, referred to in the last report, is still in evidence, although somewhat modified, and indications are that the businesses generally are getting back to more or less normal conditions.

Special attention has been given to the milk bars throughout the City areas with regard to the cleanliness of the premises, utensils and other equipment used in the preparation of drinks, and particularly to the condition of glassware and crockery and the means taken for the efficient cleansing of same.

Fifty-five (55) samples of drinking milk were taken at these premises for the purpose of chemical analysis, details of which are reported under the heading of food sampling.

Owing to the great difficulty experienced by caterers in replenishing their stocks, crockery, glassware and cutlery have not been quite up to the standard of pre-war years. As far as has been possible, care has been taken to prevent the use of badly damaged crockery or glassware, and 396 pieces of crockery and 68 pieces of glassware were seized and destroyed.

With the relaxation of rationing of work clothes we have been able to administer more effectively the regulations for the use of overalls by employees in the food industries.

Hotel bars have been regularly inspected and attention given to the washing of glasses and the colouring of waste beer in drip trays, and in most instances licensees appear to be endeavouring to comply with the Regulations. In some instances there is room for improvement, and it is hoped to bring these particular bars up to the requisite standard.

During the year one licensee was prosecuted for failing to properly wash glasses and two licensees were prosecuted for failing to colour waste beer. One of these cases was pending at the end of the year.

Renovations and repairs were carried out at 68 food premises throughout the year as shown in the following summary:

Eating Houses .....	42	Food Premises .....	20	Aerated Waters, etc. ....	6
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#### FOOD SAMPLING

The total number of samples procured for chemical analysis during the year was 444. The samples consisted of butter 12 (1); buttermilk powder 1 (-); coffee and chicory 5 (7); coffee 2 (1); dried fruits (sultanas and currants) 17 (10); clam chowder 1 (-); confectionery 1 (-); fish soup 1 (-); ice cream 4 (9); malted milk powder 1 (-); milk 347 (331); sausage meat 45 (48); vinegar 2 (6); sauces 5 (6). The figures in brackets indicate the number of samples submitted in the previous year.

Of the total number of samples submitted twenty-six (26), or approximately 5.88 per cent failed to comply with the standard. This number comprised twenty-four (24) milks, one (1) ice cream and one (1) sausage meat. In addition to the sample of sausage meat which did not comply with the standard, five (5) others failed to comply with the requirements of the Food Standards Regulations, the packages not being labelled showing that they contained preservative. The sample of ice cream showed a deficiency in fats, and the sample of sausage meat contained an excess of preservative.

Anticipating in the early part of the year the likelihood of an acute shortage in the City's milk supplies, greater vigilance was exercised in the sampling of milk carts, as it was feared that some vendors might resort to "the cow with the iron tail" to eke out their deliveries. There was, in fact, a small increase in the number of prosecutions for the addition of added water. The total number of milk samples procured during the year was 347, an increase of sixteen (16) as compared with the previous year which involved 88 vendors, comprising 27 dairymen, 4 producers, 11 house trade dairies, and 46 milk bars.

Three hundred and twenty-three (323) samples, or 93.1 per cent of the total, from all sources complied with the standard. Twenty-four (24), or 6.9 per cent, did not comply with the standard. The percentage (6.9) of failures to comply with the standard is the highest recorded since 1928, and no doubt resulted from the closer surveillance during the shortage of supplies.

Samples taken from carts in course of delivery numbered 267 and consisted of 154 from bulk supplies and 113 from bottled milk. Fifty-five (55) samples of "drinking" milk were obtained from City milk bars, twenty-one (21) from house trade dairies and four (4) Producers' samples were taken at the point of delivery.

Careful attention has again been given to the quality of milk supplied by milk bars and samples were obtained from 46 of these premises throughout the year, although for the larger part of the year owing to the shortage of milk supplies, a ban was placed on the sale of milk from these premises.

With regard to the twenty-four (24) samples found to be below standard, three (3) were from City milk bars, fifteen (15) from delivery carts consisting of nine (9) samples from bulk supplies and six (6) from bottled milk, three (3) samples from house trade dairies, and three (3) Producers' samples. An analysis of the samples below standard shows that eleven (11) failed to comply in total solids, solids-not-fat and the freezing point test; eight (8) failed to comply in solids-not-fat and the freezing point test; four (4) did not comply in their fatty solids milk

fats); and one (1) failed to comply in the total solids and milk fats. It will be noted from this analysis that nineteen (19) of the samples were adulterated by the addition of water which varied from 5 to 15 per cent.

Altogether 24 samples were submitted to the freezing point test to determine the presence of water and only five (5) passed the test satisfactorily. Proceedings were taken against all the vendors of the samples found below standard, including the producers' samples. In one instance the case was dismissed on the plea of the grounds of reasonable precautions. Proceedings were also instituted against three (3) of the producers for failing to seal milk cans.

During the period of the shortage, proceedings had to be instituted against an individual for offering to bribe an officer to refrain from submitting certain samples, all of which were found on analysis to be heavily adulterated with water. The maximum fine of £20 with £6/6/0 costs was inflicted.

An analysis of the figures shows the average quality of milk per sample as follows.—

	Total Solids	Non-Fats	Fats
All Sources .....	13.10	8.97	4.13
Bulk Supplies .....	13.10	8.90	4.20
Bottled Samples .....	13.13	9.01	4.11
Milk Bars .....	13.13	8.92	4.21
House Trade Dairies .....	13.39	8.96	4.43

The following comparative table shows the average quality of milk per sample since 1928; also the percentage of samples which did not comply with the standard.

Year	No. of Samples	Total Solids	Non-Fats	Fats	Percentage of samples below standard
1928 .....	390	12.96	8.95	4.01	1.0%
1929 .....	633	12.88	8.89	3.99	3.8%
1930 .....	276	12.90	8.90	4.00	3.6%
1931 .....	289	12.97	9.00	3.97	2.7%
1932 .....	286	12.88	8.89	3.99	2.5%
1933 .....	282	12.95	8.90	3.99	2.4%
1934 .....	281	13.01	8.95	4.06	2.4%
1935 .....	271	13.01	8.90	4.11	5.0%
1936 .....	280	12.92	8.88	4.04	3.5%
1937 .....	265	13.11	8.90	4.21	2.6%
1938 .....	269	13.11	8.97	4.14	5.2%
1939 .....	275	13.38	9.18	4.20	1.09%
1940 .....	279	13.24	8.98	4.26	3.2%
1941 .....	281	13.27	9.03	4.24	2.8%
1942 .....	274	13.18	9.00	4.18	5.8%
1943 .....	305	13.12	8.92	4.20	6.6%
1944 .....	351	13.15	8.93	4.22	4.6%
1945 .....	347	13.10	8.97	4.13	6.9%

The list herewith attached gives particulars of vendors together with the number of samples taken and the average quality of milk supplied. It shows that the average quality of the milk was again very good and closely approximates the best averages shown over previous years.

Group "A" represents 15 dairymen (56 per cent of vendors concerned) from whom 7 or more samples were obtained. Group "B" represents 7 dairymen (26 per cent of vendors) whose supplies were sampled from 4 to 6 times during the year. Group "C" represents 5 dairymen (18 per cent of vendors) from whom 3 or less samples were taken. Group "D" represents producers. Group "E" represents 'House Trade Dairies.' Group "F" represents milk bars.

## CHEMICAL ANALYSIS OF MILK 1945

### SUMMARY OF AVERAGES

#### Delivery Carts

#### GROUP "A"

(Over six (6) samples)

Fifteen (15) vendors

No.	No. of Samples	Average Quality per Sample			Remarks
		Total Solids	Non-Fats	Fats	
1 .....	14	13.4	9.0	4.4	
2 .....	10	13.4	9.0	4.4	
3 .....	26	13.3	9.0	4.3	
4 .....	16	13.2	8.9	4.3	Two samples below standard.
5 .....	22	13.0	8.7	4.3	Three samples below standard.
6 .....	32	13.1	9.0	4.1	
7 .....	20	13.0	8.9	4.1	One sample below standard.
8 .....	13	13.0	9.0	4.0	One sample below standard.
9 .....	8	13.0	9.0	4.0	
10 .....	8	13.0	9.1	3.9	Two samples below standard.
11 .....	16	12.9	9.0	3.9	
12 .....	8	12.9	9.0	3.9	
13 .....	10	12.8	8.9	3.9	
14 .....	8	12.6	8.7	3.9	Three samples below standard.
15 .....	8	12.9	9.1	3.8	One sample below standard.

## GROUP "B"

**Over three (3) and under seven (7) samples  
Seven (7) vendors**

No.	Average Quality per Sample			
	No. of Samples	Total Solids	Non-Fats	Fats
1	6	13.6	9.0	4.6
2	5	13.3	8.9	4.4
3	6	13.2	9.2	4.0
4	6	12.8	8.8	4.0
5	6	12.9	9.0	3.9
6	4	12.9	9.1	3.8
7	6	12.7	8.9	3.8

Two samples below standard.

## GROUP "C"

**(Three (3) samples and under)  
Five (5) vendors**

No.	Average Quality per Sample				Remarks
	No. of Samples	Total Solids	Non-Fats	Fats	
1	1	14.4	9.0	5.4	
2	2	13.3	9.0	4.3	
3	2	13.3	9.1	4.2	
4	2	13.1	9.1	4.0	
5	2	13.0	9.0	4.0	

## GROUP "D"

**Producers  
Four (4) vendors**

No.	Average Quality per Sample				Remarks
	No. of Samples	Total Solids	Non-Fats	Fats	
1	1	12.7	8.2	4.5	One sample below standard.
2	1	11.6	7.8	3.8	One sample below standard.
3	1	12.4	8.8	3.6	One sample below standard.
4	1	11.2	8.6	2.6	One sample below standard.

## GROUP "E"

**"House Trade Dairies"  
Eleven (11) vendors**

No.	Average Quality per Sample				Remarks
	No. of Samples	Total Solids	Non-Fats	Fats	
11	21	13.3	8.9	4.4	Three samples below standard.

## GROUP "F"

**46 Milk Bars  
"Drinking Milk"**

No.	Average Quality per Sample				Remarks
	No. of Samples	Total Solids	Non-Fats	Fats	
46	55	13.1	8.9	4.2	Three samples below standard.

## BACTERIOLOGICAL EXAMINATION OF MILK SAMPLES

The customary practice of submitting samples of milk for bacteriological examination to the Veterinary Research Institute, Parkville, has again been carried out and 257 samples were examined. Samples were procured from the Companies supplying milk under the Council's subsidised scheme and from carts in course of delivery in the City proper. Regular weekly samples were also obtained from a metropolitan hospital.

The results of the examinations show a slight improvement on the previous two years, although there is still no sign of the gradual improvement which was recorded up to the early years of the war. Seventy (70) samples, or 27 per cent of the total, were higher than the standard tentatively accepted as reasonable. Three (3) samples were found to be infected with the streptococci of mastitis, whilst ten (10) showed evidence of excessive bacterial contamination.

The whole of the samples submitted to the laboratory were from pasteurised milk, all of which were subjected to the phosphatase test, with the following results:

SOURCE	No. of samples	Complied with the test	Percentage	Failed to comply	Percentage
All Sources	257	213	83%	44	17.0%
Subsidised Milk	84	78	92.9%	6	7.1%
Metropolitan Hospital	44	42	95.5%	2	4.5%
Carts in course of delivery and other sources	129	93	72.0%	36	28.0%

The attached Table "A" gives a comparative summary of the average counts of the different milks, which are slightly less than those of last year.

Table "B" gives a comparative summary of the averages for the periods 1941-1945.

### BACTERIOLOGICAL EXAMINATIONS OF MILK SAMPLES — 1945

TABLE "A"

#### COMPARATIVE SUMMARY OF AVERAGE COUNTS OF DIFFERENT MILKS

The Counts give the number of Germs per cubic centimetre of milk.

Vendor	No. of Samples	Microscopic Count (Logarithmic)	Average % of samples under 1 million	Agar Plate Count (Logarithmic)	Average % of samples under 50,000	E. coli in 1 ml. Percentages	Remarks
All Sources .....	257	180,000	76.2%	51,000	57.2%	+77.2% +22.8%	70 letters 3 ev. s. mastitis 10 ev. gen. bac. contamn.
Vendor "A" Pasteurised	43	73,000	97.6%	23,000	79.0%	+93.0% +7.0%	4 letters
Vendor "B" Pasteurised	41	110,000	97.5%	83,000	75.6%	+90.2% +9.8%	4 letters
Vendor "C" Pasteurised Metropolitan Hospital	44	220,000	81.8%	31,000	52.2%	+97.6% +2.4%	13 letters 2 ev. s. mastitis 2 gen. bac. contamn.
Milk carts in course of delivery and other sources	129	320,000	75.9%	84,000	45.7%	+60.9% +39.1%	49 letters 1 s. mastitis 8 ev. gen. bac. contamn.

#### COMPARATIVE SUMMARY OF BACTERIOLOGICAL EXAMINATION OF MILK SAMPLES FOR THE YEARS, 1941, 1942, 1943, 1944 and 1945.

TABLE "B"

	1. Microscopic Count Percentage of samples showing under 1,000,000 per c.c.				2. Living Germs Percentage of samples showing under 50,000 per c.c.				3. Percentage of Samples showing absence of E. coli in 1 ml.									
	1941	1942	1943	1944	1945	1941	1942	1943	1944	1945	1941	1942	1943	1944	1945			
A. Milk bottled in City, pasteurised at country depot	92%	95%	98%	97%	97%	56%	82%	67%	59%	79%	90%	74%	81%	86%	93%			
B. Milk bottled in City, pasteurised at country depot	92%	83%	91%	86%	97%	60%	62%	73%	58%	75%	71%	64%	41%	63%	90%			
C. Milk delivered in bulk, pasteurised on farm				81%	70%	95%	86%	81%	70%	52%	71%	9%	52%	93%	88%	88%	93%	97%
D. Various milk carts				69%	71%	82%	69%	75%	37%	57%	51%	29%	45%	44%	31%	50%	42%	60%

Under present conditions a sample of milk may reasonably be expected to contain less than 1 million germs per cubic centimetre as shown by direct microscopic count (Column 1), less than 50,000 germs per cubic centimetre capable of growing at blood heat (Column 2), and absence of bacillus coli which is derived from filth, in one-hundredth part of a millilitre (Column 3).

The Table shows what proportion of the samples attained this standard.

### SWIMMING BATHS

Following the customary practice, regular samples of water from the various pools throughout the City were taken during the warm weather and submitted for bacteriological examination. All the samples were taken during the afternoon when the pools were in use by a good attendance of bathers. The results of these examinations, as will be noted from the report of the Director of the Bacteriology Department of the Melbourne University, indicate that the purification plants were working satisfactorily.

### RAT DESTRUCTION

The work of rat destruction has been maintained throughout the year, although the staff is still depleted. The foreman of the gang, Mr. A. E. Clarke, was released from the Military Service and resumed duty in October.

Considerable press publicity was given throughout the year to the importance of rat destruction. This, together with the work of the Rat Advisory Committee appointed by the Commission of Public Health, of which the Chief Health Inspector is a member, was responsible for a Metropolitan Rat Campaign being held during the last week in November. Acting under the advice of the Advisory Committee, all municipalities adopted a uniform method in conducting the campaign in the distribution of leaflets, advertising by posters and on the screen of local cinemas, and making rat poison available to ratepayers. In the City 35,000 leaflets were delivered to householders and scholars in various schools; advertising posters were placed on all Council Cleaning vehicles and in ironmongers and chemists shops where agreeable, and by advertising

in the local news sheets, with slides in 25 picture theatres. Whilst it is difficult to assess with any accuracy the real value of such a publicity campaign, there can be no doubt that it would have a certain effect in making the ratepayers more "rat conscious." This was definitely reflected in our own area by the numerous enquiries for advice and the increased demand for supplies of rat poison.

The customary care was exercised to note any unusual condition indicating sickness amongst the rat population, and in one instance a carcase was submitted to the Bacteriological Department for examination, the result of which indicated that the rat had been suffering from rat leprosy, which, however, is not transmissible to humans.

During the year we co-operated with a City firm of industrial chemists in their endeavour to devise a rat-proof binder cord for agricultural purposes. Edible fats were placed in small calico bags which were impregnated with a certain chemical in varying amounts. The rats were able to obtain the baits by gnawing the bags which were laid in selected spots by the rat gang and the results noted. The amount of chemical required was thus successfully ascertained. Rat tails for research purposes were also provided for the Council for Scientific and Industrial Research.

In addition to the work carried out by means of trapping, gassing and the use of dogs, 38,290 poison baits were prepared, which involved the use of 327 large loaves of bread and approximately 300 lbs. of phosphorus poison. Of this number of baits 42,180 were laid by the rat staff and 46,110 were supplied to ratepayers. The extent of the work of the rat gang is shown in the following table:

Complaints attended to	Notices under Rat Regulations	Premises visited	No. of premises where structural work carried out	Total no. of Rodents destroyed
430	25	1900	138	Rats 6989 Mice 259  7248

The species of the rats caught and destroyed during the year is shown in the following table, which gives a comparison with previous years and shows the differentiation between the sub-species of black rats (prior to 1937 the totals for black and brown rats only were recorded):

Year	M. Rattus	Black Rats	Brown Rats	Total
		M. Alex.	M. Norveg	Total
1935		3073	3428	6501
1936		4275	4490	8765
1937	82	2409	4816	8117
1938	957	2379	4708	8044
1939	1090	2065	4252	7407
1940	923	1620	3933	6576
1941	924	1510	4172	6606
1942	1034	1648	3298	5989
1943	951	2075	4743	7769
1944	546	1540	5933	8019
1945	499	1515	4975	6989

From the above classification it will be noted that M. Norveg the brown or sewer rat, still predominates in the number of rats caught in the City there being an excess of 2,961 over the combined figures of the other species.

According to a common belief, the majority of rats caught in any campaign are males, the alleged reason being that the female rat during nesting times, which occur about three times a year, is rarely lured by either baits or traps. To check this idea, a sexing of all rats caught during the year has been made, and the result, as shown in the following table, indicates a preponderance of 45 females over males in the total number destroyed.

#### SEX OF RATS CAUGHT IN THEIR SPECIES

M. Rattus	M. Alex.	M. Norveg.	Total
M	M	M	M
243	758	2471	3472
256	757	2504	3517

#### REGISTRATIONS

Registrations effected under the Health Act during the year numbered 1599 which shows an increase of 179 in the five year period 1941-45. Details, including transfers and other particulars, are shown in the following schedule:—

Premises	No. registered	No. not renewed	No. repairs or renovations	No. new registrations	No. of transfers
Boarding Houses	735	9	12	27	65
Eating Houses	484	6	42	11	126
Ice Cream and Aerated Waters, etc.	255	14	6	5	50
Common Lodging Houses	6	—	—	—	—
Cattle Sale Yards	1	—	—	—	—
Premises where Eggs are Chilled	4	—	—	—	—
Offensive Trades	114	—	8	3	3
Totals	1599	23	68	46	244

Under the Council's By-Laws and Regulations, 32 dancing saloons and 4 places of pastime were also registered.

### **Boarding Houses:**

There were 735 Boarding Houses and 6 Common Lodging Houses registered, which is an increase of 24 for the year and indicates the continuance of the demand for accommodation. Close supervision of these premises has been necessary to provide against the possibility of gross overcrowding, although it is realised that with the acute shortage of housing people must be housed. It is found that every available space which complies with the Regulations is being utilised.

The effective restrictions on the sale of this class of business, as conducted by the Commonwealth Treasury, is again indicated in the number of applications for transfers which was 65 as compared with 83 for the previous year.

Notices to effect repairs and renovations were served on the owners of properties and the registered proprietors in 22 instances and, in compliance with these and previous notices served, improvements were effected at 12 premises.

### **Eating Houses:**

The registration of Eating Houses varies little from year to year as there are 484 registered for 1945 as compared with 479 for the previous year. The number of transfers effected during the year was slightly less than for 1944.

## **OFFENSIVE TRADES**

During the year two applications under Section 82 of the Health Act 1928 were considered and consent of Council was granted for the establishment of a poultry killing, cleaning and dressing establishment in Flinders Lane, Melbourne, and for a fat rendering or melting of dripping at the City Abattoirs. Two (2) knackers' yards which had been in existence for many years, but had never been registered, were included in the list of registrations on the applications of the proprietors, this being brought about in an effort to control the alleged practice of selling horse flesh for human consumption.

As a result of a Proclamation under the Health Act including fish curing in the list of offensive trades, the only premises of this nature in the City was added to the list of registrations.

In the administration of the Offensive Trades Regulations and the relevant sections of the Health Act, 646 visits of inspection have been made and the condition of the premises generally were found to be satisfactory. The conditions found at premises associated with the disposal of dead stock and animal offal, though improved, leave much to be desired, and we are hopeful that with the return to normal conditions the situation should allow of remedial action being taken by the several proprietors.

The number of offensive trades registered for the year was 114, which are shown under the following classification, and which includes three new registrations:—

Bone Boiling and Milling, 2; Fat extracting or melting, 22; Fellmongery, Woolscouring and Woolwashing, 14; Flock, Shoddy or Mungo Manufacture, 2; Glue or Size Factories, 1; Gut cleaning or scraping, 2; Knaekers' Yards, 2; Marine Works, 2; Marine Stores, 10; Poultry killing, cleaning and dressing, 11; Rag Picking or Sorting, 2; Soap Works, 2; Store for Skins, Hides, Hoofs, Hair or Bones, 46; Boiling Down Works, 1; Oil Boiling, 1; Abattoirs, 1; Refuse Destructor, 1; Tip, 1.

## **HAIRDRESSING SALOONS**

Hairdressing establishments, both male and female, have been regularly inspected throughout the year and these premises generally have been found to be in good condition and in compliance with the Regulations made under the Health Act.

In carrying out this activity inspectors work in conjunction with the staff of the Hairdressers' Registration Board and, in an endeavour to bring about greater conformity in the administration, arrangements were made with the Registrar of the Hairdresser's Registration Board to have dual inspections of Ladies Hairdressing establishments made by respective members of the female staffs. This has resulted in a more complete understanding as to the requirements to be insisted upon and is likely to create a more satisfactory condition throughout.

## **STABLES**

As a means of combating the fly menace and ensuring the regular removal of manure and the cleansing of manure pits, stables are kept under regular supervision throughout the year, and especial care is exercised throughout the summer months when more frequent inspections are made as a means of enforcing the provisions of the Health Act.

The fear expressed some years ago, that owing to petrol shortages there might be a decided increase in stabling in the City, has not actually materialised, and the number of stables and the horse population remain fairly constant.

## **SMOKE NUISANCE**

The provisions of the Smoke Regulations are generally being complied with and greater attention is now being given to the regular sweeping of chimneys as a means to this end. Complaints only numbered 19 for the year, which seems to indicate that the administration is effective and that the matter is fairly well under control. Alterations were effected to four (4) furnaces, whilst eight (8) minor improvements were carried out at cafes and boarding houses.

## SANITARY SERVICES

In connection with temporary sanitary conveniences there were 280 installations involving approximately 14,420 clearances from buildings in course of erection or alterations and at military camps throughout the City. In addition to these installations, the marshalling grounds for troops taking part in marches through the City were again serviced and this involved 14 clearances. The nightsoil is transported by motor truck to the Melbourne and Metropolitan Board of Works depot at Campbellfield.

### INVESTIGATIONS

Enquiries and requests for advice on the various phases of the Health Act, together with complaints received, involved approximately 1247 investigations throughout the year. An analysis of these figures show that 430 related to the rat problem, 420 concerned various phases of defective housing, 106 related to foodstuffs and food premises, 86 to unsatisfactory garbage bins and refuse, 19 to smoke nuisance, 38 to yards and drainage of premises, and 10 to vermin in dwellings, whilst the remainder, 138, are grouped as miscellaneous.

### PUBLIC BUILDINGS

The customary supervision of all registered dancing saloons and places of pastime under the Council's By-Laws and Regulations has been maintained, and, in co-operation with officers of the Public Health Department, theatres and other public buildings have been regularly inspected both day and night. Resulting from this supervision it can be reported that the premises generally are being conducted in conformity with the By-Laws and Regulations.

### SUMMARY OF ROUTINE WORK CARRIED OUT DURING 1945

No. of complaints received and attended to .....	1247
Re-inspections for compliance with notices .....	2052
Fire reports received and attended to .....	235
Inspections and re-inspections under Slum Reclamation and Housing Acts .....	817
Reports forwarded to Housing Commission .....	213
Notices served under Slum Reclamation and Housing Acts .....	39
Specifications forwarded to owners under Slum Reclamation and Housing Acts .....	21
Inspections and re-inspections made under Health Act .....	288
No. of specifications forwarded to owners and proprietors under Health Act .....	82
Inspections of Hotels and Boarding Houses .....	1685
Inspections of Common Lodging Houses .....	34
Inspections of Eating Houses .....	5506
Inspections of Ice Cream and Aerated Water Premises .....	1539
Inspections of Factories (where food is manufactured) .....	1110
Inspections of other food premises .....	6350
Seizures of Footstuffs (consisting of Scrap Meat, Frozen Ox Tails, Ox Tongues, Mutton, Veal, Hams, Small Goods, Turkey, Ducks, Geese) .....	10
Inspections of Public Buildings (day and evening) .....	658
Inspections of Hairdressing Saloons .....	312
Inspections of Offensive Trades and Cattle Sale Yards .....	646
Inspections of Vacant Land .....	52
Inspections of Yards and Refuse .....	12003
Inspections of Stables and Manure Bins .....	589
Interviews with property owners, architects, contractors, etc. ....	4064
Inspections by female staff of premises where females employed .....	358
Investigations of infectious diseases and instructions to householders (scarlet fever 71; diphtheria 44; other infectious diseases 117) .....	232
Investigation of tuberculosis and domiciliary visits .....	149
Visits to Health Centres (87) and Midwives (6) .....	93
Returns of infectious disease furnished to Public Health Department .....	153
Notifications of infectious disease forwarded to Headmasters .....	164
Returns of registrations and transfers forwarded to Public Health Department .....	296
No. of Notices received under Births Notification Acts .....	1701
Plans of new buildings and alterations examined .....	104
Notices served to secure the abatement of Nuisances:—	
(a) Defective Sanitary Conveniences .....	150
(b) Defective Drainage .....	57
(c) Dirty Premises and Yards .....	30
(d) Accumulation Refuse and Rubbish .....	65
(e) Dirty and Defective Stables .....	3
(f) Other Nuisances .....	165
	470
Matters referred to other Departments—City Engineer 19; Building Surveyor 41; Dog Inspector 2 .....	62
Premises within the City registered by Factories Dept.—Factories 2739; Shops 3811 .....	6550

### NEW LEGISLATION

During the year legislation affecting the administration of the Department was introduced, and is as follows:—

Harmful Gases, etc., and Dust Regulations 1945.

Proclamation of Governor-in-Council fixing date of coming into operation of Meat Transport Regulations.

Proclamation of Governor-in-Council under Section 81 of the Health Act 1928 declaring "Fish Curing" to be an Offensive Trade within the meaning of the Act.

Regulations under Local Government (Emergency Housing Accommodation) Act 1945.

Regulations (No. 2) under Local Government (Emergency Housing Accommodation) Act 1945.

Institution of Pasteurisation Depots under the Milk Pasteurisation Act 1943.

### PROSECUTIONS

Proceedings were instituted against forty-eight (48) offenders for contravention of the Health Acts and Regulations made thereunder. In fourteen (14) instances, affecting partners and employees, the cases were withdrawn. In one instance, for selling adulterated milk, the case was dismissed on the plea of reasonable precautions offered by the dairyman, and one case for failing to colour waste beer was pending at the end of the year. In thirty-two instances defendants were convicted and fined as follows:—

Nature of Offence	No. of Cases	Fines	Costs
Selling adulterated sausage meat	1	£5 0 0	£2 7 0
Failing to label package of food containing preservative	4	6 0 0	8 9 0
Selling adulterated ice cream	1	1 0 0	2 17 6
Selling adulterated milk	17	103 0 0	63 12 6
Failing to properly seal milk cans	3	12 0 0	7 0 0
Offering to bribe an officer	1	20 0 0	6 6 0
Failing to protect food from flies and dust	1	5 0 0	3 13 0
Smoking on food premises	2	3 0 0	1 1 0
Failing to properly wash glasses	1	10 0 0	2 2 0
Failing to colour waste beer	1	6 0 0	4 4 0
Totals	32	£171 0 0	£101 12 0

### GENERAL

Despite all the many difficulties encountered in yet another year of abnormal administration, our depleted staff has again willingly discharged all their additional responsibilities and contributed largely to the reasonably satisfactory sanitary condition of the City.

Mr. W. Thomson, Health Inspector, reached the retiring age of 65 in June, after 40 years service, but agreed to continue in a temporary capacity until the end of the year, for which we were grateful. Messrs. R. L. Richards, Health Inspector, and A. E. Clarke, foreman rat-catcher, resumed duties in August and October respectively, on their discharge from the Forces. In accordance with the decision of Council to increase the inspectorial staff, two new officers from within the service, Messrs. H. P. Brown and L. W. McDonald, commenced duties in December.

It is a privilege to record my sincere appreciation of the loyalty, co-operation and assistance rendered by the entire staff throughout the year.

THOS. G. O. JORDON, M.R.S.I.  
Chief Health Inspector.

## REPORT OF BACTERIOLOGICAL EXAMINATIONS

The University of Melbourne,  
Bacteriology Department

Melbourne, N.S.W.  
20th February, 1946

### Annual Report on the Bacteriological Examinations undertaken on behalf of the Melbourne City Council by the Bacteriological Laboratory, Melbourne University, for the year 1945

**Diphtheria**—A total of 206 swabs were cultured and examined and 8 were found to be "positive."

**Scarlet Fever**—29 blood plates were examined for the presence of Haemolytic streptococci and 5 were positive, i.e. giving 8 haemolysis and the test for Lancefield's Group A organisms.

**Water**—15 specimens of water from Swimming Baths were examined and reported for total count of bacteria and B.Coli content. A high standard of bacteriological purity for the water in swimming pools was indicated by the samples.

(Signed) SYDNEY D. RUBBO,  
Professor of Bacteriology.

# REPORT OF CITY ANALYSTS

Melbourne Analytical Laboratory,

27 William Street, Melbourne,

11th January, 1946.

The Chairman, Health Committee,

City of Melbourne.

Sir,

We have the honor to report that during the year ended 31st December, 1945, we have received four hundred and forty-four (444) samples of Foods and Drugs. The following is a brief summary of the results obtained from the Analytical Examinations:

Milk—347 samples	323 complied with the standard. 11 did not comply in their total solids, solids not fat, or freezing point (Hortvet). 8 did not comply in their solids not fat, or freezing point (Hortvet). 4 did not comply in their fatty solids (milk fats). 1 did not comply in its total solids and fatty solids (milk fats).
Butter—10 samples	Complied with the standard.
Coffee—2 samples	Complied with the standard.
Vinegar—5 samples	Complied with the standard.
Coffee and Chicory—5 samples	Complied with the standard.
Ice Cream—4 samples	Three complied with the standard; 1 did not comply in its amount of fat.
Tomato Sauce—5 samples	No adulteration was detected.
Dried Fruit—14 samples	No adulteration was detected.
Fish Soup—1 sample	Did not contain excess of tin, lead or arsenic.
Clam Chowder—1 sample	Did not contain excess of tin lead, or arsenic.
Confectionery—1 sample	Special sample. The dye present was one of the permitted colours.
Malted Milk Powder—1 sample	Contained 1.1 per cent of fat. The sample consisted of powdered skim milk and dried malt extract, and possessed strong diastasic activity.
Butter Milk Powder—1 sample	Contained 8.2 per cent of fat. No adulteration was detected.
Sausage Meat—45 samples	Eight contained no sulphur dioxide. 8 contained traces of sulphur dioxide. 29 contained respectively 0.2, 0.4, 0.4, 0.4, 0.5, 0.6, 0.6, 0.7, 0.9, 1.0, 1.2, 1.2, 1.3, 1.5, 1.5, 1.7, 1.8, 2.1, 2.1, 2.2, 2.3, 2.3, 2.6, 3.0, 3.2, 3.5, 3.5, 3.5 and 4.9 grains of sulphur dioxide to the pound. No boric acid, saltpetre, nitrate or excess of starch was detected in the samples.

In addition to the above, two other samples of butter were received, but owing to the gas restrictions their analyses could not be completed within the year.

Yours obediently,

(Signed) DUNN, SON AND STONE,

(Analysts to the City of Melbourne).



